

GAO

DTIC  
ELECTE  
AUG 3 1993  
S C D

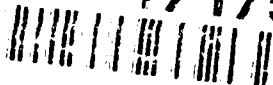
AD-A267 424



DISTRIBUTION STATEMENT A

Approved for public release  
Distribution Unlimited

93-17175



93 17 175



United States  
General Accounting Office  
Washington, D.C. 20548

**Resources, Community, and  
Economic Development Division**

B-242111

January 15, 1991

The Honorable Patrick Leahy  
Chairman, Committee on Agriculture,  
Nutrition and Forestry  
United States Senate

The Honorable E (Kika) de la Garza  
Chairman, Committee on Agriculture  
House of Representatives

The Honorable Bruce F. Vento  
Chairman, Subcommittee on National  
Parks and Public Lands  
Committee on Interior and Insular Affairs  
House of Representatives

Accession For		
NTIS	CRA&I	<input checked="checked" type="checkbox"/>
DTIC	TAB	<input type="checkbox"/>
Unannounced		<input type="checkbox"/>
Justification		
By		
Distribution /		
Availability Codes		
Dist	Avail and/or Special	
A-1		

**DTIC QUALITY INSPECTED 3**

This report responds to your request that we review the Forest Service's program for developed recreation sites. The report assesses the current extent of the maintenance and reconstruction backlog for developed recreation sites. In addition, it discusses the Forest Service's site inventory system and the effects of resource limitations on developed recreation site operations.

We are sending copies of this report to the Secretary of Agriculture and the Chief of the Forest Service. We will also make copies available to others upon request.

This report was prepared under the direction of James Duffus III, Director, Natural Resources Management Issues, who can be reached at (202) 275-7756. Other major contributors are listed in appendix V.



J. Dexter Peach  
Assistant Comptroller General

---

# Executive Summary

---

## Purpose

In 1986 the Forest Service reported a \$212 million backlog of unmet maintenance and reconstruction needs for its developed recreation sites. The Chairmen of the Senate Committee on Agriculture, Nutrition, and Forestry; the House Committee on Agriculture; and the Subcommittee on National Parks and Public Lands, House Committee on Interior and Insular Affairs, expressed concern that the backlog is adversely affecting recreational experiences at a time when the demand for recreation in national forests is increasing.

We determined (1) the extent, cause, and effects of the maintenance and reconstruction backlog for developed recreation sites; (2) how the Forest Service inventories, monitors the condition of, and tracks the maintenance and reconstruction needs of its developed recreation sites; and (3) whether limited resources are adversely affecting developed recreation site operations and Forest Service initiatives are compensating for these limitations.

---

## Background

The Forest Service is the largest supplier of outdoor recreation in the country and has about 13,000 developed recreation sites. These sites include campgrounds, picnic areas, and boating and interpretive sites. Most of these sites were built over 20 years ago and have been in use ever since. Regular maintenance is necessary to keep the sites in good condition, but when needed maintenance work cannot be performed in any given year, it is deferred and becomes part of the backlog. Day-to-day management of developed recreation sites is decentralized to the Forest Service's district office level, with oversight by the national forests, nine regional offices, and headquarters.

---

## Results in Brief

On the basis of questionnaire responses, GAO estimates that, as of the beginning of fiscal year 1990, the Forest Service had a \$449 million backlog of unmet maintenance and reconstruction needs, more than double the amount the agency reported in 1986. Insufficient resources, both funding and staffing, were the primary cause of the backlog, according to Forest Service officials. Little of the agency's overall recreation budget is available to address backlog needs, while other factors, such as aging facilities and increased usage, are adding to it. The effects of deferred maintenance include health and safety hazards, resource damage, and diminished recreational experiences. Ultimately, deferred maintenance could result in the loss of sites. At current funding levels, GAO believes that not only will the agency be unable to eliminate the existing backlog, but also the backlog will continue to grow.

GAO developed its estimate of the backlog because the Forest Service does not have a reliable system for monitoring or reporting on the nationwide condition and maintenance needs of its developed recreation sites. Although it had a system to gather such information, Forest Service headquarters discontinued the system in 1986 because it was considered outmoded, a burden, and unresponsive to district offices' management information needs. The agency is nearing completion of a new system to replace the old one; however, the reliability of the backlog data generated by the new system may be questionable because Forest Service headquarters has no requirement or format for collecting and recording at the district level the basic site condition information on which reliable estimates must be based. Rather, Forest Service headquarters assumes that such information will be collected in a reliable fashion. Furthermore, the agency has not developed guidelines or internal control measures to ensure the accuracy of data reported through the new system, nor has it included a measure of backlog severity to identify the extent of high priority needs, such as health and safety hazards. Until these shortcomings are addressed, neither the Forest Service nor the Congress will be able to accurately determine the extent and severity of the backlog, the progress made in reducing it, or the funds needed to do so.

Resource limitations were only one of several factors affecting changes in the size and type and to a lesser extent the number and length of season of developed recreation sites. However, resource limitations have resulted in reduced or eliminated services, such as garbage collection and site cleaning. Under its National Recreation Strategy, the Forest Service uses volunteers and a public/private cost-share program to help compensate for limited resources. While helpful, the strategy faces constraints that will limit its effectiveness in reducing the backlog.

---

## Principal Findings

---

### Causes and Effects of the Backlog

According to Forest Service officials, insufficient resources were the primary cause of the maintenance and reconstruction backlog for developed recreation sites. Of the \$112 million appropriated for recreation management in fiscal year 1989, only about \$43 million was spent at the Forest Service district level. These funds, according to district officials, are sometimes less than needed for day-to-day operations, leaving little to none available to address the backlog. District officials also said that

---

a significant reduction in their maintenance staffs has occurred over the last several years. When maintenance is deferred, the effects of natural forces, visitor use, and vandalism go uncorrected, accelerating site deterioration. GAO observed hazards such as disintegrating boat ramps and leaking toilets. Ultimately, sites not repaired or maintained may be lost permanently.

---

### Information Reporting System Is Unreliable

The Forest Service is nearing completion of a recreation site information system to replace the one that it discontinued in 1986. The new system will aggregate nationwide backlog data from inputs by the regional offices. However, the reliability of the data from the new system may be questionable because (1) the regions are not required to and some may not obtain data from district offices where operations and maintenance occur; (2) headquarters has no requirement or established format for collecting and recording site condition information on which the backlog figure will be based; and (3) the agency has not established guidelines or internal controls to ensure that backlog information is accurate. Furthermore, the system does not provide for measuring backlog severity to help the agency and the Congress identify the highest priority needs.

Two of the Forest Service's regional offices are in the early stages of developing a system that could provide basic site condition information by district. However, this need may not be met because Forest Service headquarters is not participating with the regions in developing the system, no firm date for completing the system has been established, and regions are not required to use the system if and when it is completed.

---

### Impacts of and Efforts to Deal With Resource Limitations on Developed Site Operations

GAO found that while some changes have occurred over the years in the number, type, and size of developed recreation sites, limited resources were only one of several reasons for these changes. However, limited resources have resulted in reduced or eliminated services at some sites. For example, GAO found that at some sites the Forest Service had stopped providing water at campgrounds or lifeguards at swimming areas. Although officials at some districts GAO visited said limited resources have contributed to the use of concessionaires and contractors to operate sites, questionnaire data do not indicate such a trend nationwide.

Under its National Recreation Strategy, the Forest Service has made extensive use of volunteers to operate and maintain sites, according to

---

district officials. Although volunteers have been very helpful, they bear an associated cost because Forest Service staff must take time away from their regular duties to plan and supervise volunteer work. Also, district officials had mixed opinions about the effectiveness of the strategy's challenge cost-share program, under which the Forest Service provides funds for site construction and renovation and challenges private organizations to match or exceed those funds. In some districts GAO visited, officials had realized benefits through participation in the program, but other officials said they had not obtained Forest Service funding for program participation. Because of limitations on the use of volunteers and funds available for the challenge cost-share program, GAO believes that the National Recreation Strategy is not likely, by itself, to eliminate or substantially reduce the backlog.

---

## Recommendations

To ensure that the Forest Service's information on the condition of its developed recreation sites is reliable and useful, GAO recommends that the Secretary of Agriculture direct the Chief of the Forest Service to

- establish a requirement to collect and record, at the district level, discrete site condition information;
- install internal controls and develop guidelines on how to ensure the accuracy of reported backlog data;
- establish firm dates for completing the planned management information system being developed by the regions;
- require all its regions, forests, and districts to implement the system being developed by the regions once it is completed; and
- group or rank the backlog, by defined categories, so that funds can be allocated for those needs deemed to be of higher priority.

---

## Agency Comments

GAO discussed the factual information in this report with Forest Service headquarters officials responsible for developed recreation. The officials generally agreed with the facts in the report. However, as requested, GAO did not obtain official agency comments on this report.

# Contents

<b>Executive Summary</b>		2
<b>Chapter 1</b>		10
<b>Introduction</b>	Forest Service Organization	11
	Type, Number, and Capacity of Developed Recreation Sites	11
	Objectives, Scope, and Methodology	12
<b>Chapter 2</b>		16
<b>Backlog of Unmet Maintenance and Reconstruction Needs at Forest Service Developed Recreation Sites</b>	Aging Facilities and Public Demands Contribute to the Backlog	16
	Funding and Staffing Levels Have Not Been Adequate to Reduce the Backlog	19
	Effects of Deferred Maintenance and Reconstruction	21
	Conclusions	28
<b>Chapter 3</b>		30
<b>Forest Service Does Not Have a Reliable Management and Inventory Reporting System</b>	The Forest Service Maintained a Recreation Information Management System Between 1965 and 1986	30
	Nationwide Backlog Data Questionable in the Absence of a Reporting System	31
	Reliability of New Management and Reporting System Is Questionable	32
	Regions Planning Management Information System That Could Address Data Reliability Concerns	34
	Conclusions	35
	Recommendations	36
<b>Chapter 4</b>		38
<b>Impacts of and Efforts to Deal With Resource Limitations on Developed Site Operations</b>	Number, Type, Size and Season Length of Developed Sites	38
	Resource Limitations Contributed to Reduced or Eliminated Services at Certain Developed Sites	42
	Use of Concessionaires or Contractors to Operate Sites	43
	Forest Service Efforts to Deal With Limited Resources	43
	Conclusions	45

## Appendixes

Appendix I: Distribution of Forest Service Funding and Workforce Between Developed and Dispersed Recreation, Fiscal Years 1976-90	46
Appendix II: Budget History: Total Forest Service Recreation Management and Recreation Construction for Fiscal Years 1980-90	48
Appendix III: Questionnaires Sent to Developed Recreation Sites and Forest Service Districts	50
Appendix IV: Trend in Number and Capacity of Developed Recreation Sites by Type, Selected Years From 1972 to 1987	61
Appendix V: Major Contributors to This Report	62

## Related GAO Products

64

## Tables

Table 1.1: Developed Recreation Sites in the National Forests	12
Table 1.2: Forest Service Regions, Forests, and Districts Visited	14

## Figures

Figure 1.1: Recreation in National Forests, Fiscal Year 1989	10
Figure 2.1: Total and Developed Recreation Use in National Forests, Number of Recreation Visitor Days	18
Figure 2.2: Cracked and Disintegrating Boat Ramp, Bridger-Teton National Forest in Wyoming	23
Figure 2.3: Broken Picnic Table, Ozark-St. Francis National Forest in Arkansas	24
Figure 2.4: Soil Compaction and Exposed Tree Roots, Green Mountain National Forest in Vermont	25
Figure 2.5: Carved and Damaged Picnic Table, Toiyabe National Forest in Nevada	26
Figure 2.6: Broken Toilet Seat, Ozark-St. Francis National Forest in Arkansas	27
Figure 2.7: Graffiti in Restroom Building, San Bernardino National Forest in California	28
Figure 4.1: Trends in Size of All Forest Service Developed Recreation Sites, 1972-87	40
Figure 4.2: Trends in Size of Forest Service Campgrounds and Picnic Areas, 1972-87	41



---

## Contents

---

Figure I.1: Distribution of Forest Service Recreation Funding Between Developed and Dispersed Programs, Fiscal Years 1976 Through 1990	46
Figure I.2: Distribution of Forest Service Recreation Staff Between Developed and Dispersed Programs, Fiscal Years 1976 Through 1990	47

---

## Abbreviations

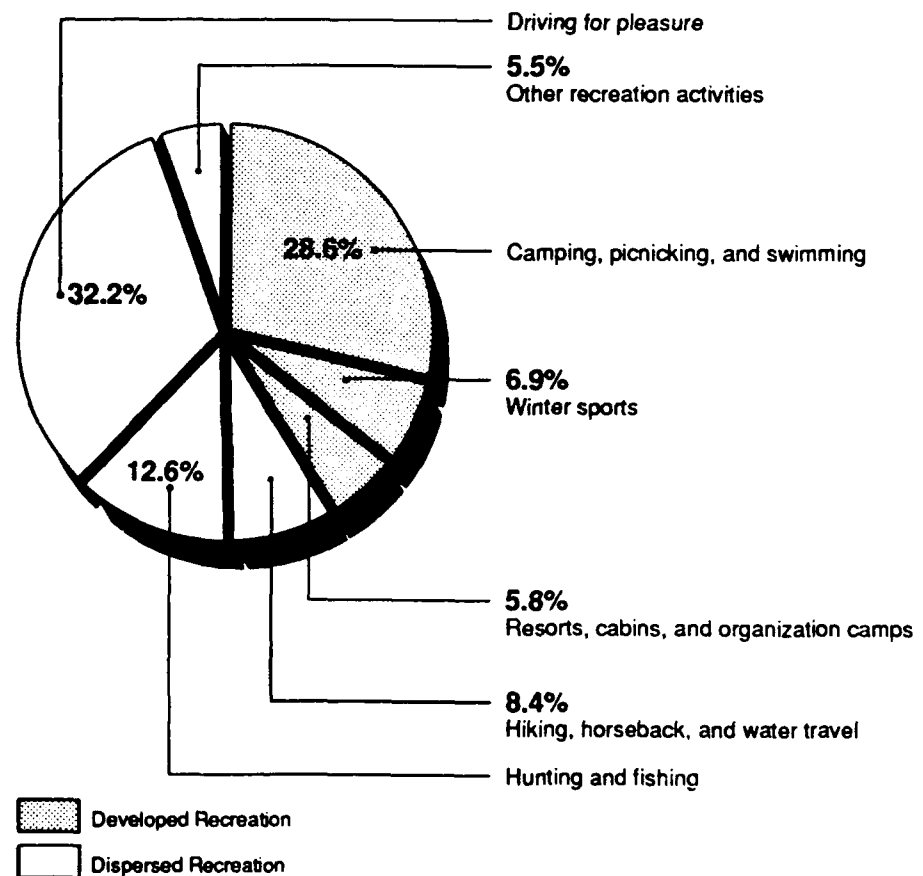
GAO	General Accounting Office
RIM	Recreation Information Management
RPA	Forest and Rangeland Renewable Resources Planning Act of 1974



# Introduction

The Department of Agriculture's Forest Service is the largest single supplier of outdoor recreation in the country. More outdoor recreation occurs on Forest Service lands than on any other federal lands—about a quarter of a billion recreation visitor days a year.<sup>1</sup> The 191 million acres of land administered by the Forest Service provide an array of recreation opportunities: those that exist at developed recreation sites (e.g., picnic areas and campgrounds), and those that are dispersed, or exist in the general forest area (e.g., hiking, horseback riding, and cross-country skiing). As shown in figure 1.1, nearly 60 percent of the recreation on Forest Service land is dispersed; the remaining 40 percent occurs at developed recreation sites.

**Figure 1.1: Recreation in National Forests, Fiscal Year 1989**



Source: Forest Service

<sup>1</sup> A recreation visitor day is equivalent to 12 hours' use by one person.

However, the majority of the Forest Service's recreation resources—both money and staff—is devoted to maintaining developed recreation sites. Appendix I shows the relative distribution of budget and staff between developed and dispersed recreation for fiscal years 1976 through 1990.

---

## Forest Service Organization

The Forest Service is comprised of a headquarters office, located in Washington, D.C.; 9 regions; 121 forest supervisor offices; and over 600 ranger districts, hereafter called districts.<sup>2</sup> The Forest Service manages 149 national forests in the United States and Puerto Rico. Because the Forest Service's day-to-day management of developed recreation sites is decentralized, most data and knowledge about developed recreation sites exist at the district level.

---

## Type, Number, and Capacity of Developed Recreation Sites

As shown in table 1.1, the national forests contain nearly 13,000 developed recreation sites that can accommodate about 1.7 million visitors at one time (based on 1987 data, the latest available from the Forest Service).

---

<sup>2</sup>Region, forest supervisor, and district offices are often referred to collectively as field offices.

**Table 1.1: Developed Recreation Sites in the National Forests**

Type of site	Number	Capacity <sup>a</sup>
Boating	1,145	123,633
Campgrounds	4,402	475,793
Documentary (e.g., of historic note)	175	6,776
Fishing	124	9,187
Hotels, lodges, and resorts	547	45,919
Interpretive and information	949	57,311
Observation	474	25,147
Organizational (e.g., Scouts)	478	67,176
Other concessionaire	146	17,948
Picnic areas	1,438	106,803
Playgrounds, parks, and sports	102	19,881
Recreation residences	1,393	88,266
Ski and winter sports	330	516,235
Swimming areas	316	77,104
Trailheads	880	59,481
<b>Total</b>	<b>12,899<sup>b</sup></b>	<b>1,696,660</b>

<sup>a</sup>Number of people at one time

<sup>b</sup>This total includes approximately 9,000 sites owned by the Forest Service and approximately 4,000 sites owned by private parties. However, at privately owned sites the Forest Service administers permits and may have some maintenance responsibilities.

## Objectives, Scope, and Methodology

Concerned that deferred maintenance and reconstruction (the backlog) of developed recreation sites were adversely affecting recreational experiences in national forests, the Chairmen of the Senate Committee on Agriculture, Nutrition, and Forestry; the House Committee on Agriculture; and the Subcommittee on National Parks and Public Lands, House Committee on Interior and Insular Affairs, asked us to review the Forest Service's developed recreation maintenance needs. Specifically, we determined

- the extent, cause, and effects of the maintenance and reconstruction backlog for developed recreation sites (see ch. 2);
- how the Forest Service inventories, monitors the condition of, and tracks the maintenance and reconstruction needs of its developed recreation sites (see ch. 3); and
- whether resource limitations are adversely affecting developed recreation site operations and Forest Service initiatives are compensating for these limitations (see ch. 4).

We sent two questionnaires to Forest Service district offices to obtain information on the Forest Service's developed recreation sites and site operations. We used this approach because the information we sought was generally not available at Forest Service headquarters. Instead, because the Forest Service is decentralized and because its Recreation Information Management (RIM) system was discontinued beginning in 1986, most data and knowledge about developed recreation sites reside at the district offices.

Accordingly, we sent one questionnaire to district offices to obtain information on a stratified random sample of 780 developed recreation sites. We chose not to ask for updated backlog estimates on a districtwide basis because such data were likely to be based upon inventories conducted in 1986, the last year in which the Forest Service's information system was in operation. Instead, we asked districts to provide updated backlog estimates for a sample of individual sites that had been physically inspected to ensure the greatest accuracy possible in updating the backlog figure. We also conducted extensive follow-up calls to check discrepancies and large variations from previously reported backlog estimates.

This site-specific questionnaire requested information such as site age, use, and capacity; site maintenance and reconstruction needs; and type of site operator (Forest Service or other). To choose our sample, we stratified the universe of about 13,000 developed recreation sites into six categories by the dollar value of backlog reported in 1986.<sup>3</sup> We randomly selected 150 sites from each of five strata consisting of sites with reported backlogs of \$7,000 or less; \$7,001 to \$26,000; \$26,001 to \$66,000; \$66,001 to \$158,000; and \$158,001 to \$499,999, respectively. From the sixth stratum (sites that had reported a backlog of \$500,000 or more), we included all 30 sites. This survey, including mail and telephone follow-ups, was conducted between September 18, 1989, and February 28, 1990. We obtained a 100-percent response rate.

We sent another questionnaire to all of the 637 district offices to obtain budgetary information and the number of developed recreation sites added to the districts' inventories in fiscal years 1988-89. We received responses from 633 (99 percent) of the 637 offices. Appendix III contains the two questionnaires and the summarized responses.

---

<sup>3</sup>We used the universe of sites listed in the Forest Service's 1986 RIM data base, the most recent and complete listing of sites that included backlog data.

All sample surveys are subject to sampling errors, which define the upper and lower bounds of the estimate calculated from the survey responses—that is, the confidence interval. All sampling errors for the estimates in this report were calculated at the 95-percent confidence level. This confidence level means that 95 percent of the time the sampling procedures used here will yield a confidence interval that includes the true value we are estimating.

To supplement the questionnaire data and obtain information on the management of developed recreation sites, we reviewed documents and interviewed Forest Service staff at headquarters, 5 regions, 10 forest supervisor offices, and 20 district offices. We selected the 5 regions because their reported maintenance and reconstruction backlog, collectively, was about 78 percent of the total reported 1986 backlog. We selected the 10 forest supervisor and 20 district offices to reflect geographic diversity and diversity in the type of developed recreation sites they contained (e.g., urban picnic sites versus remote campgrounds), as well as a range of reported backlog amounts. To observe the condition of developed recreation sites, we accompanied Forest Service personnel to numerous sites, concentrating on those that had been a part of our sample. Table 1.2 lists the regions, forests, and districts visited.

**Table 1.2: Forest Service Regions, Forests, and Districts Visited**

Region	Forest	District
Eastern	Allegheny	Bradford Ridgeway
	Green Mountain	Manchester Rochester
Intermountain	Bridger-Teton	Jackson Pinedale
	Toiyabe	Bridgeport Las Vegas
Pacific Northwest	Deschutes	Bend Sisters
	Mt. Baker-Snoqualmie	Darrington Skykomish
Pacific Southwest	San Bernardino	Big Bear San Geronio
	Sequoia	Hume Tule River
Southern	Nantahala	Highlands Tusquitee
	Ozark-St. Francis	St. Francis Sylamore

To gain an understanding of the type of developed recreation site data reported to Forest Service headquarters and to the Congress, we reviewed annual budget and appropriations documents. We also reviewed the Forest Service's plans for developed recreation sites in its new management information system.

We conducted our review from July 1989 to November 1990 in accordance with generally accepted government auditing standards. We discussed the factual information in this report with Forest Service headquarters officials responsible for developed recreation, and they generally agreed with the facts contained in this report. However, as requested, we did not obtain official agency comments on a draft of the report.



# Backlog of Unmet Maintenance and Reconstruction Needs at Forest Service Developed Recreation Sites

The Forest Service's developed recreation sites are subject to deterioration over time caused by natural forces and public use. In addition, when a site is planned for major renovation or reconstruction, the Forest Service also considers upgrading it to meet public demand for new or more modern amenities, such as showers and electrical hookups, and/or to meet the needs of new clients, such as people with disabilities. To the extent that the Forest Service cannot keep pace with day-to-day maintenance and reconstruction needs, the work is deferred and becomes a part of the backlog.

On the basis of questionnaire responses from the Forest Service, we estimated that as of September 30, 1989, a \$449 million backlog of unmet maintenance and reconstruction needs existed for developed recreation sites.<sup>1</sup> This amount is more than twice the \$212 million the Forest Service reported in 1986. According to Forest Service officials, funding and staffing levels have not been adequate to reduce the growing backlog of maintenance and reconstruction needs. The backlog has resulted in health and safety hazards, resource damage, and diminished recreational experiences. Ultimately, sites not repaired or maintained may be lost permanently.

## Aging Facilities and Public Demands Contribute to the Backlog

Contributing to the maintenance and reconstruction backlog at developed recreation sites, according to district officials, are aging facilities, increased public use, and public demand for new or modernized facilities. Older facilities contribute to the backlog because they deteriorate faster and are more difficult to repair than newer facilities. High use contributes to the backlog because it also increases facility deterioration. Public demand for modern facilities contributes to the backlog because major reconstruction of existing facilities often involves upgrading them to meet current standards or needs.

## Aging Facilities

On the basis of the questionnaire responses, we estimate that about 51 percent of the Forest Service's developed recreation sites are between 21 and 40 years old and that about 27 percent are more than 40 years old.<sup>2</sup> Older facilities deteriorate faster than new ones, and their maintenance is more expensive and difficult, according to district officials.

<sup>1</sup>This estimate has a sampling error of  $\pm$  \$70.4 million, at a 95-percent confidence level, which means we are 95-percent confident that the backlog is between \$378.6 million and \$519.4 million.

<sup>2</sup>The sampling errors for these estimates are  $\pm$  6.0 percent and  $\pm$  5.2 percent, respectively.

For example, older water and sanitation systems are difficult to maintain and repair, and replacement parts are not always available. A campground in the Republic district of the Colville National Forest in Washington, according to the questionnaire respondent, "was considered the best of its kind in 1939." But "years of neglect have turned it shabby." The respondent added that \$24,385 is needed in this campground to rebuild the water system, among other improvements. Similarly, in the Greys River district of the Bridger-Teton National Forest in Wyoming, according to the questionnaire respondent, three campgrounds have no water because the water systems rusted out more than 10 years ago, and each requires about \$5,000 to replace. In the Highlands district of the Nantahala National Forest in North Carolina, parts cannot be found to repair a 60-year-old bathhouse; therefore, the facility will have to be replaced at a cost of approximately \$35,000.

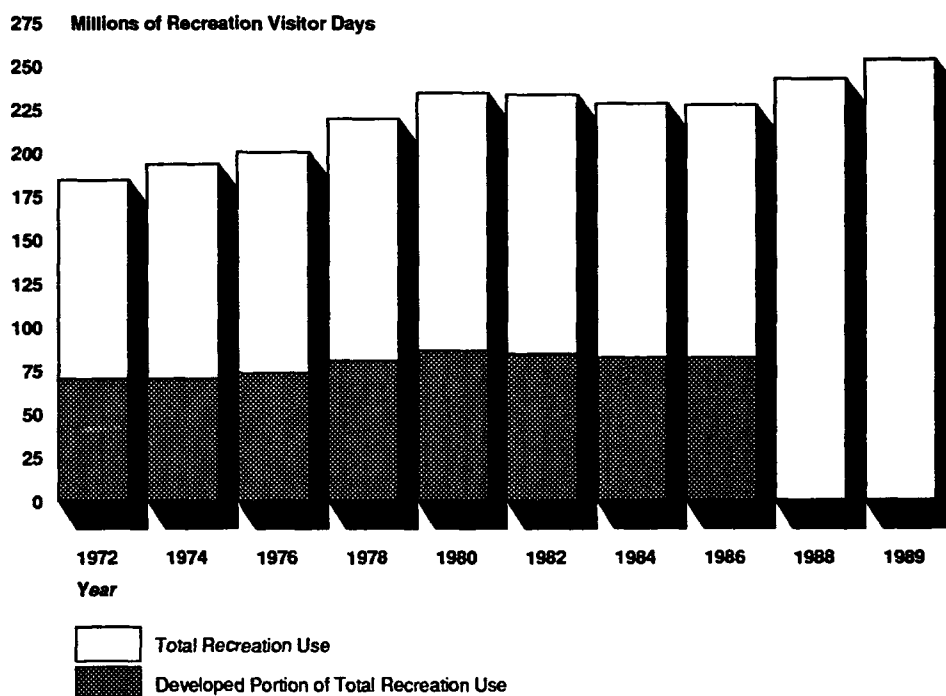
---

## Increased Public Use

According to Forest Service data, recreation use in national forests increased from 184 million visitor days in 1972 to 253 million visitor days in 1989, as shown in figure 2.1. The data also show an increase in recreation use related to developed recreation sites of approximately 17 percent between 1972 and 1986 (latest data available).

Chapter 2  
Backlog of Unmet Maintenance and  
Reconstruction Needs at Forest Service  
Developed Recreation Sites

Figure 2.1: Total and Developed  
Recreation Use in National Forests,  
Number of Recreation Visitor Days



A recreation visitor day is defined as 12 hours of use by one person.

1972 to 1976 data reported on a calendar year basis, 1978 to 1989 data reflects fiscal year data.

Only total recreation use available for fiscal years 1988 and 1989.

Source: Forest Service

At some sites, the increase has been even more dramatic. For example, at the Mesa district of the Tonto National Forest in Arizona, according to the questionnaire respondent, use increased by over 120 percent between 1980 and 1989, from 1.26 million recreation visitor days to 2.80 million. At the Nantahala National Forest in North Carolina, visitation to an observation point increased to over 300,000 in 1989. As a result, the restroom facility at the observation point had to be rebuilt three times in the last 4 years, and as of January 1990 it needed to be replaced at a cost of about \$75,000, according to a forest official.

---

## Demand for New or Modern Facilities

Public demand for modern facilities and additional amenities has added to the backlog. Many visitors to the national forests, according to forest officials, are urbanized and demand modern and convenient amenities such as hot showers, electrical hookups, and access for people with disabilities. In some cases, when deemed essential for public use or site operation, such amenities are considered part of the backlog. However, adding such amenities is costly.

For example, in the Tallulah district of the Chattahoochee National Forest in Georgia, according to the questionnaire respondent, a campground built in 1936 needs about \$25,000 in renovation and redesign to accommodate today's longer recreational vehicles and the modern camping public, who want electrical hookups and hot showers. Likewise in the Ridgeway district of the Allegheny National Forest in Pennsylvania, district officials were planning the reconstruction of a large campground located near a lake, where campsites will be renovated, enlarged, and provided with electrical hookups for recreational vehicles at an estimated cost of about \$65,000.

Additionally, Forest Service policy requires renovated facilities to meet the needs of people with disabilities. According to the questionnaire respondent in the Santa Lucia district of the Los Padres National Forest in California, a family campground requires approximately \$30,000 to provide toilets accessible to people with disabilities. The campground at the Ridgeway district of the Allegheny National Forest will require an estimated \$20,000 to construct a fishing pier and modify access trails and a trail around the lake so that all will be accessible to people with disabilities.

---

## Funding and Staffing Levels Have Not Been Adequate to Reduce the Backlog

According to district officials, funding and staffing levels have not been adequate to keep up with day-to-day operations and maintenance, much less to make substantial progress in addressing the backlog of deferred maintenance and reconstruction needs. (See app. II for a summary of the budget history of Forest Service developed recreation funding for fiscal years 1980 through 1990.)

---

## Funding Levels Inadequate

The trickle-down of fiscal year 1989 appropriations to the district offices illustrates their difficulty in reducing the backlog. Total funds appropriated that year for Forest Service recreation were about \$203 million. Of that amount, about \$67 million went to dispersed recreation (consisting of wilderness, trails, and cultural resources), leaving about

\$136 million for developed recreation. Of the \$136 million, about \$112 million was for day-to-day operations, maintenance, and administration (recreation management), and \$24 million was for construction.

Of the \$112 million appropriated for recreation management, about \$69 million was for program expenses at forest supervisor, regional, and headquarters offices, primarily salaries and administrative costs. Only about \$43 million, according to the district questionnaire respondents, was spent at the district level. Officials at 8 of the 20 districts we visited said they applied little to none of this funding toward their existing backlogs. Of the remaining 12 district offices, officials at 9 districts said they used less than 20 percent of their developed recreation funds to address their backlogs, and officials at the other 3 districts said they used from about 25 percent to 50 percent of this funding for their backlogs.

According to regional officials, of the \$24 million available for constructing developed sites, about \$11 million was for reconstruction, and thus could have been applied to the backlog. The other \$13 million was used for new construction as well as administrative costs.

According to district officials, deferred maintenance and reconstruction are generally undertaken only when the condition of facilities poses a threat to the public's health and safety. Because districts have been unable to significantly reduce the backlog and maintenance work continues to be deferred, the backlog has grown over the years. Officials at 3 of 5 regions and 8 of 10 national forests we visited also confirmed that the amount of funding generally available to address backlog needs was inadequate.

The following comments, summarized from questionnaire respondents and district officials, illustrate the districts' concern over the funding available to them to do necessary maintenance and address the backlog.

- The recreation budget for the district is marginal at best. Several campgrounds have deferred maintenance or reconstruction needs, but because of budget limitations, the district can only perform day-to-day maintenance to keep the campgrounds open.
- Funding is well below the amount necessary to perform routine maintenance, let alone to perform deferred maintenance or reconstruction.
- Critical work goes unfunded from year to year. This work includes relining toilets, stabilizing roads and other facilities that are settling or

slowly slipping downhill, and generally repairing or replacing items damaged through wear, tear, and vandalism.

- The district's operating funds are down 17 percent over the last 5 years. The district is at or below maintenance levels for its developed sites. Pavement, water systems, vehicle barriers, vegetation, and toilet systems all need work.

---

## Staffing Shortfalls

According to district officials, budget shortfalls also have led to reductions in recreation staff levels, particularly for seasonal staff, who are generally hired to do operations and maintenance activities during the summer season.<sup>3</sup> Because of staff shortages, maintenance work goes undone, thereby adding to the backlog.

For example, in the Mesa district of the Tonto National Forest in Arizona, according to the questionnaire respondent, the number of staff the district was able to finance was reduced from 86 in fiscal year 1980 to 27 in fiscal year 1988 because of budget shortfalls. Over the same period, according to this respondent, visitor days increased from 1.26 million to 2.98 million.

In the San Bernardino National Forest in California, according to forest officials, the number of seasonal employees decreased from 60 in 1982 to 5 in 1989, a 92-percent decrease. Similarly, in the Green Mountain National Forest in Vermont, the number of seasonal employees has decreased by about 50 percent over the past 10 years.

In the Ozark-St. Francis National Forest in Arkansas, the senior official at one district stated that a cost savings measure they were forced to take because of severe funding cuts was to decrease the facility maintenance crew and defer major maintenance and replacement work except for repair of emergency breakdowns. According to this official, this really is not a cost-effective measure; maintenance can be postponed a year or two, but the district must eventually catch up.

---

## Effects of Deferred Maintenance and Reconstruction

When maintenance or reconstruction is deferred, developed recreation facilities can deteriorate more rapidly than expected. This deferral has resulted in health and safety hazards, resource damage, diminished recreational experiences, and ultimately, may result in the loss of sites.

---

<sup>3</sup>Data breakouts by district of total Forest Service recreation staff over a sufficient period of time to show the staffing trends cited, for both full-time and seasonal staff, were unavailable.

---

## Deferred Maintenance Has Resulted in Health and Safety Hazards

The deferral of needed maintenance work can result in health and safety hazards such as contaminated drinking water, disintegrating boat ramps, and unstable stairs and bridges. On the basis of the questionnaire responses, we estimated that \$104 million<sup>4</sup> of the \$449 million backlog is needed to eliminate such health and safety hazards. According to district officials, they try to give top priority to eliminating such problems, and they generally are able to take care of at least the most serious problems they identify. However, less serious problems may be deferred. For example, an official of the San Geronio district in the San Bernardino National Forest in California said he immediately removes from campsites the hazardous tree limbs that are liable to fall from trees overhead where they are suspended, but he sometimes defers removal of such hazards when they lie outside a site's immediate perimeter.

We observed health and safety hazards such as untrimmed tree limbs, leaking toilets, cracked and crumbling fire pits, broken picnic tables, and cracked and disintegrating boat ramps at several of the sites we visited. District officials told us that, although none were hazards they considered to be life-threatening, further deterioration could make them more dangerous. Figures 2.2 and 2.3 show examples of health and safety hazards we observed on our site visits.

---

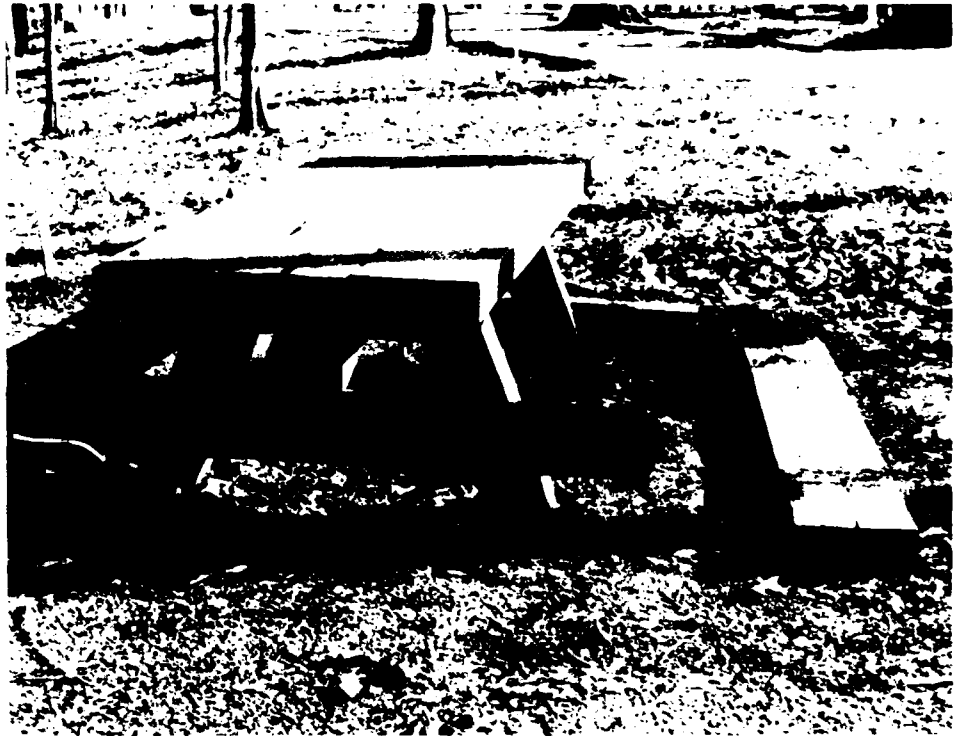
<sup>4</sup>The sampling error for this estimate is  $\pm$  \$20 million.

Figure 2.2: Cracked and Disintegrating  
Boat Ramp, Bridger-Teton National  
Forest in Wyoming





Figure 2.3: Broken Picnic Table, Ozark-  
St. Francis National Forest in Arkansas



### Deferred Maintenance Has Resulted in Resource Damage

Without routine maintenance, the environmental damage caused by natural forces and human use goes uncorrected and can accelerate site deterioration. For example, soil compaction or erosion that expose tree roots can result in loss of trees. Such problems contribute to an overall decline in the public's recreational experience.

At some sites we visited we observed resource damage such as soil compaction, exposed tree roots, and a severely eroded pathway within a developed recreation area. Figure 2.4 shows an example of resource damage we observed.

**Figure 2.4: Soil Compaction and  
Exposed Tree Roots, Green Mountain  
National Forest in Vermont**



### **Facilities That Are Not Adequately Maintained Result in Diminished Recreational Experiences**

Although not posing an immediate threat to the health of humans or the environment, damage from cumulative use or vandalism, if not corrected, can ruin or degrade the public's recreational experience, as we also reported in 1989 and 1990.<sup>5</sup> Spray painted graffiti, carvings on picnic tables, leaking roofs, and damaged or destroyed facilities are examples of such problems. Figures 2.5 through 2.7 show examples of restroom facilities and picnic tables damaged by vandals and graffiti on facility walls.

<sup>5</sup>Parks and Recreation: Maintenance and Reconstruction Backlog on National Forest Trails (GAO RCED-89-182, Sept. 22, 1989) and National Forests: Special Recreation Areas Not Meeting Established Objectives (GAO RCED-90-27, Feb. 5, 1990).

**Chapter 2**  
**Backlog of Unmet Maintenance and**  
**Reconstruction Needs at Forest Service**  
**Developed Recreation Sites**

**Figure 2.5: Carved and Damaged Picnic**  
**Table, Toiyabe National Forest in Nevada**



Chapter 2  
Backlog of Unmet Maintenance and  
Reconstruction Needs at Forest Service  
Developed Recreation Sites

Figure 2.6: Broken Toilet Seat, Ozark-St.  
Francis National Forest in Arkansas

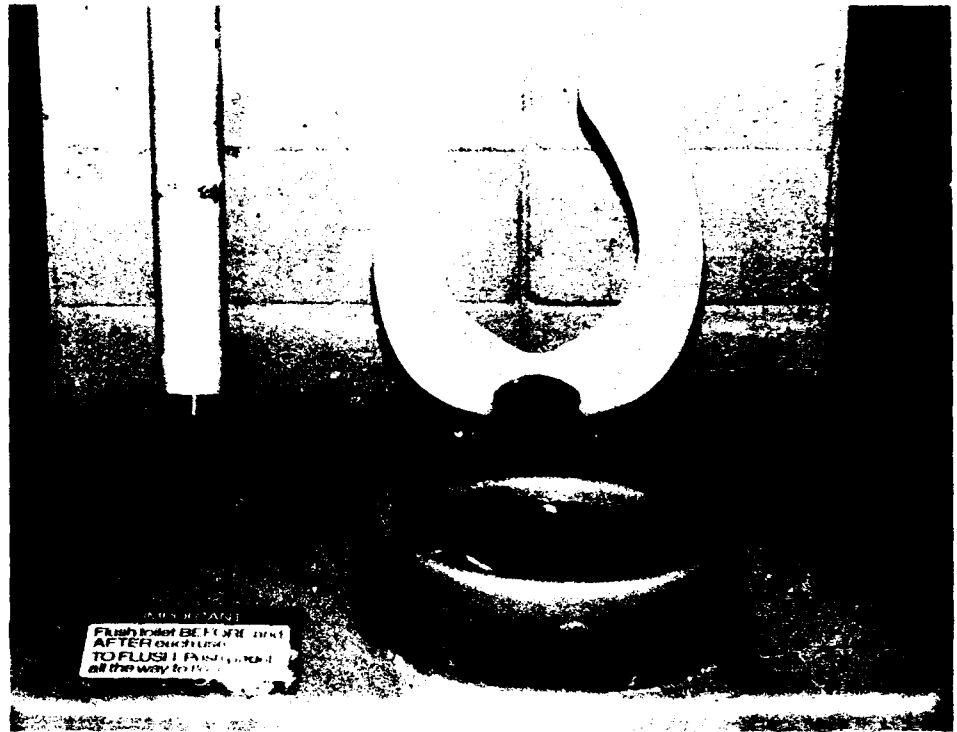
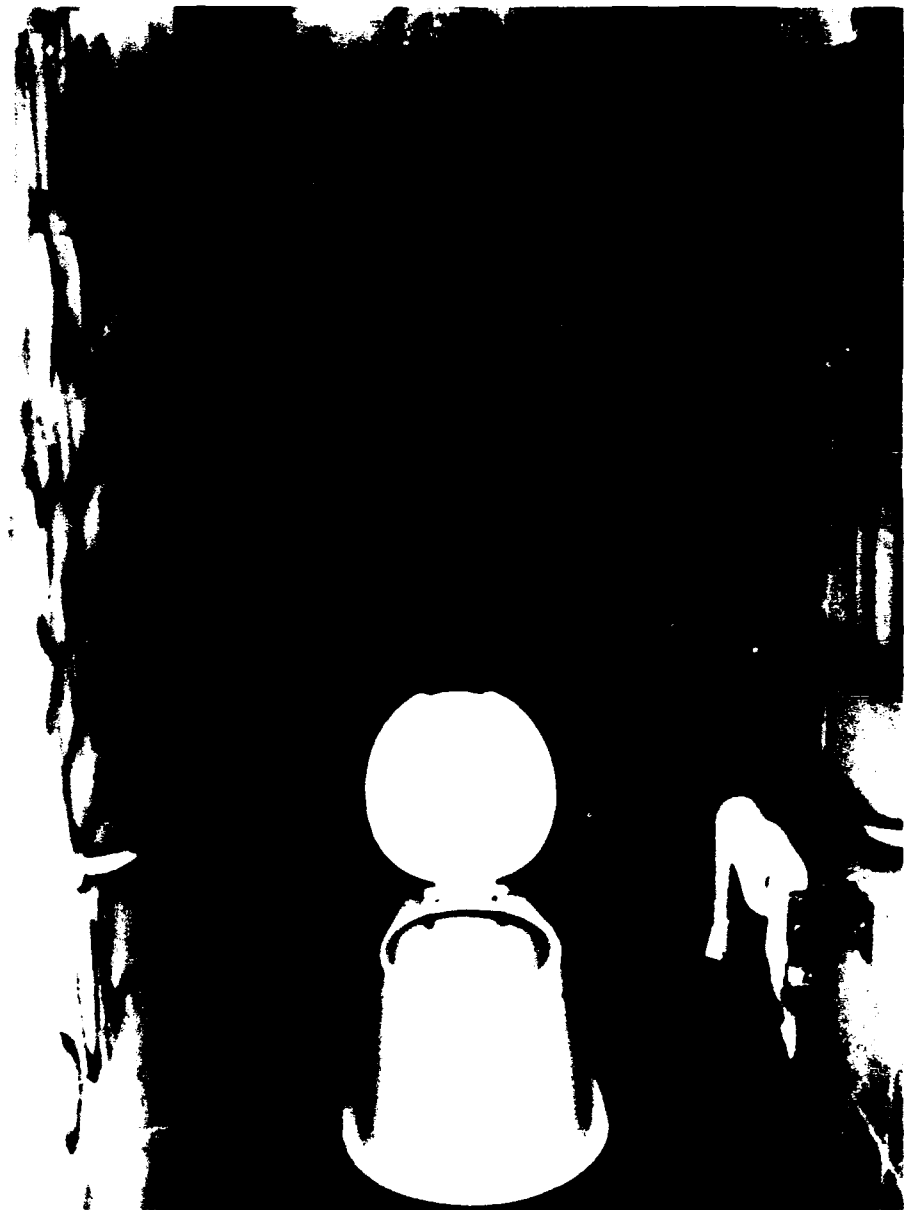


Figure 2.7: Graffiti in Restroom Building,  
San Bernardino National Forest in  
California



## Conclusions

As of September 30, 1989, we estimate that about \$449 million was needed to eliminate the backlog of unmet maintenance and reconstruction needs at Forest Service developed recreation sites—more than double the amount the Forest Service reported in 1986. Little of the overall recreation budget is actually available to address this backlog, while factors such as aging facilities and increased use are adding to it.

---

**Chapter 2**  
**Backlog of Unmet Maintenance and**  
**Reconstruction Needs at Forest Service**  
**Developed Recreation Sites**

---

When maintenance is deferred, developed recreation sites can more rapidly deteriorate, resulting in health and safety hazards, resource damage, diminished recreational experiences, and ultimately, the loss of sites. While the Forest Service has so far been able to address the most serious health and safety hazards, work on other less serious hazards and damage continues to be deferred. At current funding levels, not only will the Forest Service be unable to eliminate the existing backlog, but also the backlog is likely to continue to grow.

# Forest Service Does Not Have a Reliable Management and Inventory Reporting System

The Forest Service does not have a reliable system to monitor or report to the Congress maintenance and reconstruction needs at its developed recreation sites. A system that gathered recreation site condition information was discontinued in 1986 because it was considered outmoded, a burden, and unresponsive to field offices' management information needs. Since 1986 the Forest Service has been developing a new information system to replace the one it discontinued. In the interim, Forest Service field offices have used various methods to maintain data on the status of their developed recreation sites, ranging from detailed inventories to informal handwritten notes and memory.

The Forest Service is nearing completion of a new information system to again gather data on the maintenance and reconstruction needs of its developed recreation sites. However, the reliability of the data generated by the new system will be questionable, since no requirement or established format exists for collecting and recording the basic site condition information from the district office level on which reliable maintenance and reconstruction need estimates must be based. In addition, no guidelines or internal controls have been established to ensure that the data quality standard for these estimates will be met.

Two Forest Service regional offices have recently begun developing a system that could obtain the site condition information needed to develop reliable backlog data. However, the absence of Forest Service headquarters commitment to this system, no established time frames for completing it, and no requirement that all field offices use the system if and when it is developed make it doubtful that reliable backlog information for the Forest Service's developed recreation sites will be available in the near future.

## The Forest Service Maintained a Recreation Information Management System Between 1965 and 1986

Between 1965 and 1986, the Forest Service had a recreation management and reporting system called the Recreation Information Management (RIM) system. The old RIM system was designed to gather from the district level, and store in a centralized database, information on the Forest Service's developed recreation sites, as well as other recreational opportunities. RIM data elements included basic site-specific inventory information such as number and type of facilities, site location, size, condition, and level of use. The system also contained information on site-specific funding requirements for operations and routine maintenance, as well as funding requirements for deferred maintenance and reconstruction (backlog). Backlog information provided by the system was to

be used to aid in reporting to the Congress and in Forest Service budget formulation.

Since Forest Service headquarters discontinued the old RIM system, the only RIM data elements that have continued to be reported annually are types of recreation use, measured as "recreation visitor days." Forest Service headquarters officials told us that the old RIM system was discontinued because (1) outmoded technology made using the system a cumbersome exercise, (2) its reporting requirements put a heavy work burden on district staff, and (3) replacing the old system with one more responsive to district officials' needs would increase the quality of the data because the district offices would have more incentive to consistently and accurately update their database.

## Nationwide Backlog Data Questionable in the Absence of a Reporting System

Since discontinuing the old RIM system, Forest Service headquarters has not required the district offices to maintain inventories of site condition, track their backlog needs, or routinely report such information to headquarters. Accordingly, the extent to which site condition and backlog data have been documented has varied widely among districts. Some districts have continued to prepare and maintain extensive facility condition and backlog documents, while others have relied on informal handwritten notes or memory to track site conditions. During our field work, we found that 12 of the 20 districts we visited were unable to provide us with a current and accurate districtwide backlog figure.

Several regional foresters expressed concerns to Forest Service headquarters in late 1989 and early 1990 about the need for a system that would provide recreation data on which to base their management decisions. One regional forester stated that since discontinuing the old RIM system, no other system has been available to maintain a broad set of critical recreation information and that reports, briefing papers, project planning, and other program needs draw from inconsistent, disjunct inventories of dated or hastily acquired information.

One such report is required by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) (P.L. 93-378). This act requires the Department of Agriculture to prepare a recommended program for Forest Service activities every 5 years. The program is a long-range strategic plan for managing the Forest Service's renewable natural resources activities and helps chart the long-term course of Forest Service management of the national forests. Because the RPA program is prepared once every 5 years and provides information and proposals for Forest



Service actions that the executive branch considers in developing annual budgets and the Congress uses to consider funding for Forest Service activities, the information contained in this report should be both current and accurate.

The May 1990 RPA report, however, contains an estimate of the developed recreation site backlog as of 1989 that was prepared in the absence of reliable data. The report states that as of 1989, the recreation site backlog was \$287.2 million. This reported figure is significantly less than the \$449 million backlog we estimated on the basis of questionnaire responses from district offices. This difference is particularly significant because the Forest Service's resource needs to deal with the backlog over the next 5 years will be based, in part, on the backlog figure it reported.

---

## Reliability of New Management and Reporting System Is Questionable

A new RIM system to collect backlog and other recreation information is nearing completion and is planned to be fully implemented in the spring of 1991. The new system is more streamlined than the old system it is replacing. The old system provided for gathering from the district level, and maintaining in a centralized database, information relevant to the backlog including a site condition record, which is a list of individual facilities by site, condition category, and the amount of funding required to operate and maintain them. In contrast, the new system will aggregate nationwide backlog data from inputs by its nine regional offices, which are to provide total backlog figures, by region and state. However, the reliability of the backlog figures that the new system will generate may be questionable because

- the regions are not required to obtain backlog data from the district offices where the most reliable knowledge of site condition exists;
- the system has no requirement or established format for collecting and recording the discrete site condition information on which the backlog figure will be based; and
- the agency has not established guidelines on how to meet the data quality standard for backlog information nor established internal controls to ensure that the standard will be met.

In addition, while the system is planned to contain the total dollar amount of the maintenance and reconstruction backlog for developed sites, the system is not planned to contain any measure of backlog severity, such as how much of the backlog is related to safety and health hazards and resource damage.

---

**No Requirement That  
Information Be Obtained  
From the District Office  
Level**

The new RIM system requires that the Forest Service's nine regional offices provide backlog data to headquarters. However, the most detailed knowledge of the condition of developed recreation sites is not available at the regional office level but rather at the Forest Service's 637 district offices. Under the new system, no requirement exists that the information the regions provide be obtained from the districts. Forest Service headquarters officials told us that even though they do not require the regions to obtain backlog data from the districts, they assumed that the regions would obtain data from that level. This assumption is questionable, however, because we found that when the Forest Service completed testing of the new system in December 1989, officials at 8 of the 20 districts we visited had either not been asked to provide backlog data to their forests or their regions or could not recall having provided the information. Furthermore, three of the districts that were asked to provide backlog data simply applied an inflation factor to backlog estimates that were several years old.

---

**The New System Has No  
Provision to Collect and  
Record Site Condition  
Information**

Even if the Forest Service district offices are asked to provide the developed site backlog information, they may not provide accurate figures because no requirement or established format exists for collecting and recording discrete site condition information. To be accurate, the backlog figure must be based on basic facility condition information, such as the number of picnic tables, camping areas, and parking lots that are in disrepair at each site and their level of deterioration. In the absence of such basic information, estimates of the resources needed to repair or replace facilities at these sites are questionable.

The old RIM system contained a "facility condition record" that included an inventory of the number and type of facilities at each developed recreation site, listed according to condition category and funding required to repair, replace, add, or remove the facilities. We found that since the old RIM system was discontinued in 1986, 12 of the 20 districts we visited had stopped maintaining an up-to-date status of their developed recreation sites. They were unable to provide us with reliable districtwide backlog figures for their developed recreation sites. However, the new RIM system neither requires nor provides for the collecting and recording of such site condition information. Thus, the backlog data that are to be generated by the new RIM system may not be underpinned by the site-specific information from which reliable estimates can be generated.

---

**Internal Controls for  
Verifying RIM Data  
Quality Have Not Been  
Established**

In October 1989 the Forest Service notified its regions that a data accuracy standard of + or - 10 percent had been established for the backlog dollar figure to be reported in the new RIM system. However, the Forest Service has not developed guidelines on how to achieve this standard nor specific internal controls for the new RIM system to verify that the data quality standard will be met.

According to Forest Service headquarters officials, activity reviews are an adequate internal control to assess data accuracy. However, such reviews are periodic evaluations of only one to four regions, not data checks integrated into the system's regular operation. Furthermore, these reviews are newly defined each fiscal year, and thus it is uncertain when or even if all of the regions would be covered in such reviews. Moreover, the Forest Service has not yet decided whether the new RIM system will be the subject of an activity review of developed recreation planned for fiscal year 1991. While periodic reviews, audits, and evaluations are valuable tools in assessing the adequacy of internal controls, they are not a substitute for them. Specifically, Forest Service headquarters has not established control procedures to provide reasonable assurance that the established data quality standard for backlog information will be met.

---

**New System Has No  
Provision to Collect and  
Record Backlog Needs by  
Severity**

The maintenance and reconstruction backlog data to be collected and maintained in the new RIM system are not planned to include a measure of severity, such as backlog items that constitute health and safety hazards. When the entire system is operational, the Forest Service plans to maintain and annually update information on the nationwide backlog, broken down by region and state. Severity could be measured in terms of health and safety hazards, resource damage, and potential loss of sites. Such measures would give an indication of the priority of addressing Forest Service recreation backlog needs.

---

**Regions Planning  
Management  
Information System  
That Could Address  
Data Reliability  
Concerns**

Two of the Forest Service's regional offices are in the early stages of developing a detailed automated management information system, part of which will facilitate reporting of the backlog information required in the new RIM system. As such, this system could address the need for district reporting of basic site condition information, but it is uncertain if or when this system will be fully developed and implemented.

Originally, the Forest Service stated that the new RIM system would be available to district offices for input and output of information,

including data that regional, forest supervisor, and district offices wanted in the system, as well as national data elements required by headquarters. However, by October 1989, Forest Service headquarters had limited the planned new RIM system to requiring only that the regional offices provide information specified by Forest Service headquarters. According to a regional recreation coordinator, the new RIM system as designed will convey information from the regional offices to headquarters, but it will not facilitate gathering the required information from the level where day-to-day operations and maintenance occur.

Forest Service headquarters has left the regional offices with the option of developing systems that will provide supporting data for nationwide information requirements in the new RIM system. In December 1989 and January 1990, five of the nine regional offices requested that Forest Service headquarters assume the lead in developing a system that could be used by all regions, forests, and districts. However, Forest Service headquarters declined to assume this role and has instead left it to the Forest Service regions to develop their own systems.

Forest Service field staff decided in November 1989 that the system the regions are developing will include all of the elements that the old RIM facility condition record had in it, to be used as needed by individual offices. This system would include a standard format to record, at the district level, discrete site condition information. According to one region, this system is needed to provide the aggregated information necessary to meet national requirements under the new RIM system. However, there is no assurance that this need will be met because

- headquarters is not committed to participating with the regions in developing this system;
- no firm date for completing this system has been established; and
- all regions are not required to participate in this system if and when it is completed.

---

## Conclusions

The Forest Service has not had a servicewide system to gather and record data on the condition and maintenance and reconstruction funding needs for developed recreation sites for about 4 years. As a result, it has not had reliable information on the status of its backlog of deferred maintenance and reconstruction, and neither the Forest Service nor the Congress have the information needed to make informed budgetary decisions for the Forest Service's developed recreation sites.

The Forest Service's new recreation information management system is not likely to fill this void. No requirement or established format exists for collecting and recording at the district level the discrete site condition information critical for making an aggregate estimate of the Service's maintenance and reconstruction backlog. Moreover, no guidelines have been issued nor internal controls developed to ensure the accuracy of the backlog data reported by the regions.

All of these deficiencies could, but will not necessarily, change once the planned automated management information system the regions are developing becomes a reality. This system, however, faces hurdles of its own, including lack of commitment at the Forest Service headquarters level that could result in a fragmented, underfunded, and lengthy development effort. The Forest Service also runs the risk that the system will not be implemented by all its field offices once it is completed, because it is to be an optional system.

In addition, the Forest Service does not plan to group or rank the maintenance and reconstruction backlog to identify its highest priority needs. Without such a measure of backlog severity, both the Forest Service and the Congress will have difficulty in establishing funding priorities. Until these shortcomings are addressed, neither the Forest Service nor the Congress will be able to accurately determine the extent and severity of the backlog, the progress made in reducing it, or the funds needed to do so.

---

## Recommendations

To ensure that information is available to make informed decisions concerning the maintenance and reconstruction of developed recreation sites, we recommend that the Secretary of Agriculture direct the Chief of the Forest Service to develop and implement a Servicewide system to accurately gather and record maintenance and reconstruction needs. To accomplish this, the Forest Service should

- establish a requirement to collect and record, at the district level, discrete site condition information, which when aggregated will yield reliable nationwide figures on maintenance and reconstruction needs;
- install internal controls and develop guidelines on how to ensure the accuracy of reported backlog data;
- establish firm dates for completing the planned management information system being developed by the regions;
- require all its regions, forests, and districts to implement the system being developed by the regions once it is completed; and

---

**Chapter 3**  
**Forest Service Does Not Have a Reliable**  
**Management and Inventory**  
**Reporting System**

- 
- group or rank the backlog of deferred maintenance and reconstruction by defined categories, so that funds can be allocated for those needs deemed to be of higher priority.

# Impacts of and Efforts to Deal With Resource Limitations on Developed Site Operations

Limited resources were only one of several factors affecting changes to recreation sites. While some changes have occurred in the number, type, and size of sites, total recreation site capacity has increased rather than decreased over the past 15 years. We also found that changes in the length of managed-use seasons<sup>1</sup> were more commonly attributable to factors not directly related to resource limitations, such as public demand and weather. However, district officials told us that resource limitations have resulted in reduced or eliminated services at certain sites. Although officials at some districts that we visited said that limited resources have contributed to an increased use of concessionaires and contractors to operate sites, questionnaire data do not indicate such a trend nationwide.

Under the umbrella of the National Recreation Strategy, districts have used volunteers and cost-share programs to compensate for limited resources. The districts have made extensive use of volunteers to operate and maintain sites. Of the 20 districts we visited, some have benefited from participating in the challenge cost-share program, through which private organizations pledge to match Forest Service funds for constructing or renovating recreation facilities. Other districts, in contrast, have not obtained funding for challenge cost-share programs.<sup>2</sup>

## Number, Type, Size and Season Length of Developed Sites

On the basis of responses to our questionnaires, we estimate that between 1986 and September 30, 1989, the Forest Service had closed about 500 or 4 percent of the 12,915 sites that existed in 1986.<sup>3</sup> During the same period, however, the Forest Service added about 180 developed sites. Reasons for site closures included insufficient funding, health and safety hazards, decreased demand, resource damage, and cost-effectiveness. Reasons for adding new sites included meeting a new or different type of demand, increasing demand, and offsetting capacity lost at other sites.

Of the estimated 500 sites closed through the end of fiscal year 1989, only about one-quarter had backlog amounts of more than \$150,000

<sup>1</sup>The managed-use season is the length of time a site is open for public use and receives scheduled routine maintenance and cleanup.

<sup>2</sup>The Forest Service has on several occasions since fiscal year 1983 proposed broadening its existing authority to charge user fees at additional recreation sites to increase the revenues the agency receives for site operations and maintenance. To date, the agency has not been granted this authority.

<sup>3</sup>The sampling error for this estimate is 2.5 percent.

reported in 1986. These data indicate that the overall effect of site closures since 1986 on the size of the backlog is probably small.

According to Forest Service records, from 1972 to 1987<sup>4</sup> the total number of developed recreation sites has remained relatively constant; however, changes have occurred in the size and type of sites during that time. District officials attributed these changes to the Forest Service's response to public demand for new or different types of facilities.

Overall, the types of sites whose numbers increased the most were fishing sites and trailheads; documentary, interpretive, and information sites; playgrounds, parks, and sport sites; and winter sports sites. Those experiencing the greatest reduction were recreation residences,<sup>5</sup> organization sites,<sup>6</sup> and campgrounds and picnic areas. (See app. IV for trends in the number and types of developed recreation sites.)

In general the smallest sites, with capacities to accommodate 25 people or less, decreased by about 14 percent over the 15-year period. On the other hand, the larger sites with capacities of more than 75 people, increased by about 20 percent during the same period. These trends are shown in figure 4.1. The decline in small sites occurred primarily among campgrounds and picnic areas, and recreation residences. At the same time, the number of small interpretive and information sites increased. Among the larger sites, campgrounds and picnic areas; boating and swimming sites; winter sport sites; playgrounds, parks, and sport sites; and interpretive and information sites made up the majority of the 20-percent increase.

---

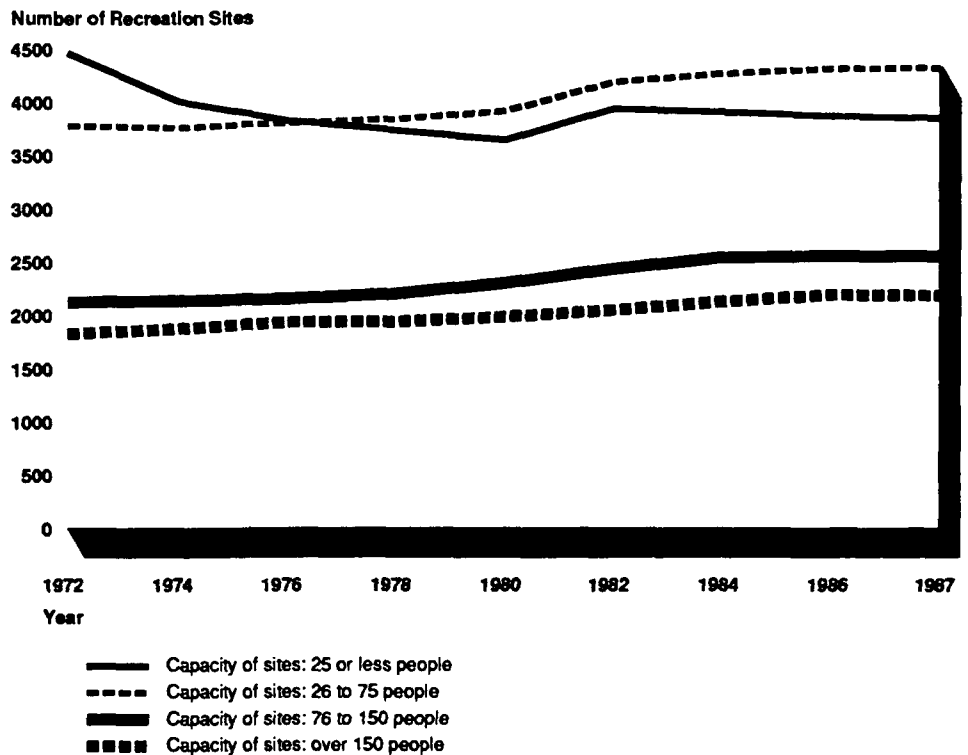
<sup>4</sup>Historical recreation data cited in chapter 4 were obtained from Forest Service records and the old RIM system database. Because we were able to obtain overall historical data only through 1986, and limited data for 1987, we attempted to supplement these data wherever possible through the questionnaires and interviews with regional, forest, and district officials.

<sup>5</sup>Recreation residences are privately owned residences located on Forest Service land under the terms of a permit.

<sup>6</sup>Organization sites are self-contained camps designed primarily for organized group recreation use, with lodging, meals, social, and educational opportunities usually provided. They may be privately owned or Forest Service owned.



Figure 4.1: Trends in Size of All Forest Service Developed Recreation Sites, 1972-87



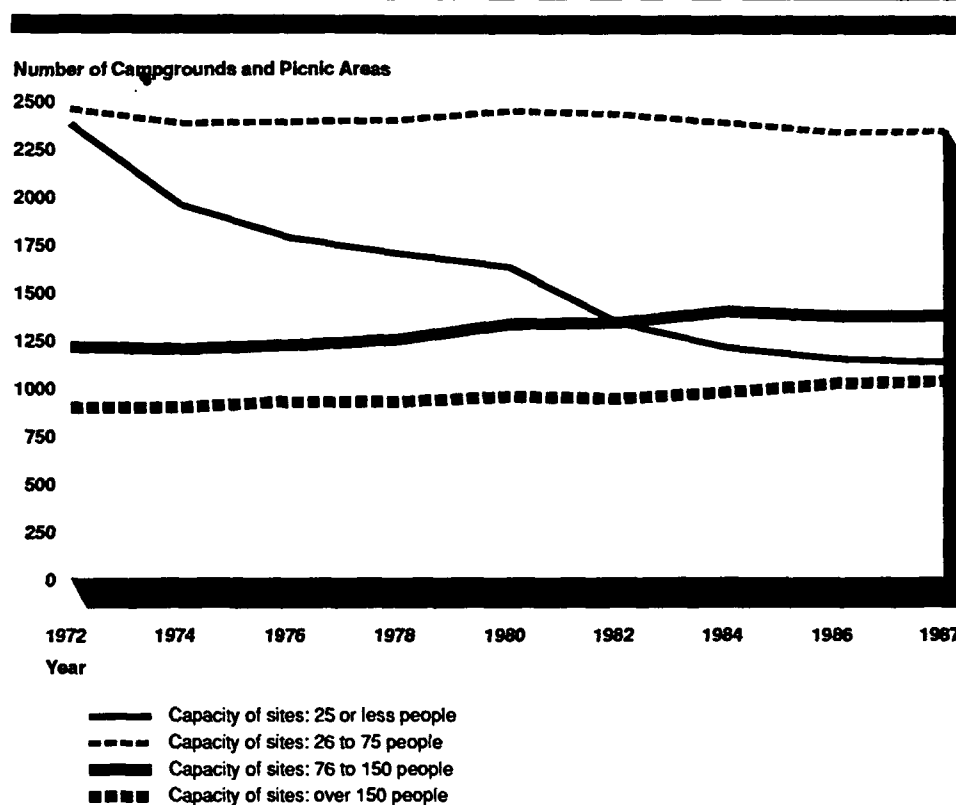
Capacity of sites = the number of people the facility can accommodate at one time.

1987 was the latest year for which detailed capacity data was accumulated by the Forest Service.

Source: Basic data provided by the Forest Service

The trend toward fewer small sites was more apparent for campgrounds and picnic areas. As shown in figure 4.2, the total number of small campgrounds and picnic areas decreased, the number of medium-sized sites remained relatively constant, and the number of large campgrounds and picnic areas increased. Although the total number of campgrounds and picnic areas decreased over the 15-year period, the increase in larger sites resulted in a net increase in total capacity over time.

Figure 4.2: Trends in Size of Forest Service Campgrounds and Picnic Areas, 1972-87



Capacity of sites = the number of people the facility can accommodate at one time.

1987 was the latest year for which capacity data was accumulated by the Forest Service.

Source: Basic data provided by the Forest Service

Although the number of small recreation sites decreased, the gain in large sites resulted in a net 26-percent increase in the capacity of all developed recreation sites from about 1.3 million people at one time in 1972 to about 1.7 million in 1987. (See app. IV for trends in total capacity of developed recreation sites.)

Our questionnaire results confirm the general trend of increasing site capacity. According to our estimate, between 1986 and 1989 the Forest Service increased the capacity at about 5 percent of its recreation sites (about 590 sites)<sup>7</sup> and reduced the capacity of about 3 percent of the

<sup>7</sup>The sampling error for this estimate is  $\pm 2.6$  percent.

sites (about 360 sites).<sup>8</sup> The primary reason for adding capacity was to meet increased demand, whereas the reasons cited most often for eliminating capacity included a change in the calculation of site capacity, resource damage, health and safety hazards, and a decrease in demand.

Between 1979 and 1989, the length of managed-use seasons has not changed significantly, according to Forest Service data and questionnaire responses.<sup>9</sup> For all developed sites nationwide, the average season length, about 200 days a year, remained fairly constant between 1979 and 1989. For the sites that did experience a change in season length, the questionnaire respondents told us that extensions were more common than reductions. The predominant reasons for a change in season length, whether longer or shorter, were public demand and weather.

---

### Resource Limitations Contributed to Reduced or Eliminated Services at Certain Developed Sites

According to district officials, resource limitations have caused them to reduce or eliminate services at developed sites, in turn, reducing the quality of the public's recreational experience. Officials at 10 of the 20 district offices we visited said they have reduced or eliminated services. Because funds are limited, they have had to reduce the frequency of such services as garbage collection and site cleaning. They also have had to eliminate such services as providing water at campgrounds or maintaining lifeguards at swimming areas.

A further consequence of reduced services is the potential for lost revenues from fee receipts. For example, the Land and Water Conservation Fund Act of 1965 (P.L. 88-578) as amended by P.L. 93-81 of 1973, requires that drinking water be provided at a campground before a fee can be collected. However, about \$2,000 in revenues from one campground was foregone when contamination caused the Skykomish district of the Mt. Baker-Snoqualmie National Forest in Washington to turn off the water system. In another case, the Tule River district of the Sequoia National Forest in California did not collect fees at one campground during a 4-week period because a water line had to be replaced (estimated revenue lost unavailable).

---

<sup>8</sup>The sampling error for this estimate is  $\pm 1.9$  percent.

<sup>9</sup>Before 1979, Service data on seasons of use were not available.

---

## Use of Concessionaires or Contractors to Operate Sites

As of September 30, 1989, questionnaire responses show that about 10 percent<sup>10</sup> of all Forest Service developed sites were operated by concessionaires, and 2 percent<sup>11</sup> were operated by contractors. Concessionaires operate and maintain sites for a percentage of the fees collected, while contractors operate and maintain sites for a set fee.

On the basis of the questionnaire responses, we estimated that about 7 percent<sup>12</sup> of all sites changed operator status during 1985 through 1989. While some sites changed from Forest Service-operated to concessionaire- or contractor-operated, others run by concessionaires or contractors reverted to Forest Service operation. As a result, no significant change has occurred on a nationwide basis in the proportion of sites operated by concessionaires and contractors since 1985. However, according to some district officials, limited resources have contributed to the use of concessionaires or contractors to operate sites.

Some district officials identified drawbacks to using concessionaires and contractors, whereas others saw benefits. Some officials said the Forest Service is better able to provide certain services, such as interpretation programs, than private operators. On the other hand, concessionaires can often provide services that the Forest Service is unable to because of limited staffing, such as providing amenities like food or firewood for sale.

---

## Forest Service Efforts to Deal With Limited Resources

To compensate for limited funds and staff, the districts use other means to help them operate and maintain developed recreation sites. In April 1988, the Forest Service issued the National Recreation Strategy. The strategy calls for stretching available federal dollars through greater use of volunteers and through seeking out public and private groups to share the expense of developing, repairing, and operating sites and facilities. The strategy applies to all national forests.

---

## Cost-Share Programs

The National Recreation Strategy encourages participation in a challenge cost-share program, through which the Forest Service provides funds for site construction and renovation and challenges private organizations to match or exceed those funds or make in-kind contributions

---

<sup>10</sup>The sampling error for this estimate is  $\pm 3.7$  percent.

<sup>11</sup>The sampling error for this estimate is  $\pm 1.8$  percent.

<sup>12</sup>The sampling error for this estimate is  $\pm 2.9$  percent.

for the projects. In total, the Forest Service made about \$5.2 million available in fiscal years 1988 through 1990 for developed recreation challenge cost-share projects. These funds were more than matched with \$10.9 million in funds and in-kind contributions from participating outside organizations. However, the strategy's effectiveness may be restricted by (1) limitations in the ability of the current Forest Service work force to accomplish additional responsibilities and (2) limitations on the use of volunteers.<sup>13</sup>

District officials varied in their opinions regarding the National Recreation Strategy's effect on the condition of developed recreation sites. Some said their districts have benefited from the strategy through participation in challenge cost-share projects. Challenge cost-share program projects include the construction of picnic shelters, warming huts, and fishing piers, and the repair and rehabilitation of various other recreation sites.

Others have seen virtually no effect on the condition of recreation sites from the strategy. Under the strategy, Forest Service offices must identify project partners in order to submit challenge cost-share proposals. The offices compete with each other for project funding, and when proposals are rejected, staff must tell donors that their projects were not approved. This rejection can discourage Forest Service staff from initiating future proposals.

---

## Use of Volunteers

According to district officials, many are so pressed by day-to-day tasks and existing priorities that they do not have enough time or resources to adequately plan and implement new initiatives. And, while volunteers contribute significantly to the development, operation, and maintenance of recreation sites and facilities, they carry an associated cost. Recruiting, training, and supervising volunteers requires a considerable investment of time and money, with no assurance that the volunteers will remain committed and available.<sup>14</sup>

Nevertheless, many districts make extensive use of volunteers to operate and maintain sites. Forest Service officials stated that without the help of volunteers, some facilities would deteriorate and sites would

---

<sup>13</sup>Also see National Forests: Special Recreation Areas Not Meeting Established Objectives (GAO/RCED-90-27, Feb. 5, 1990).

<sup>14</sup>See also Parks and Recreation: Maintenance and Reconstruction Backlog on National Forest Trails (GAO/RCED-89-182, Sept. 22, 1989).

have to be closed. The Senior Conservation Employment Program, a cooperative program funded by the Department of Labor that pays for services provided by senior citizens, was particularly cited as invaluable to current recreation site operations. In addition to performing light and heavy maintenance, volunteers provide various other services. For example, they collect fees, act as campground hosts, and provide interpretive services.

---

## Conclusions

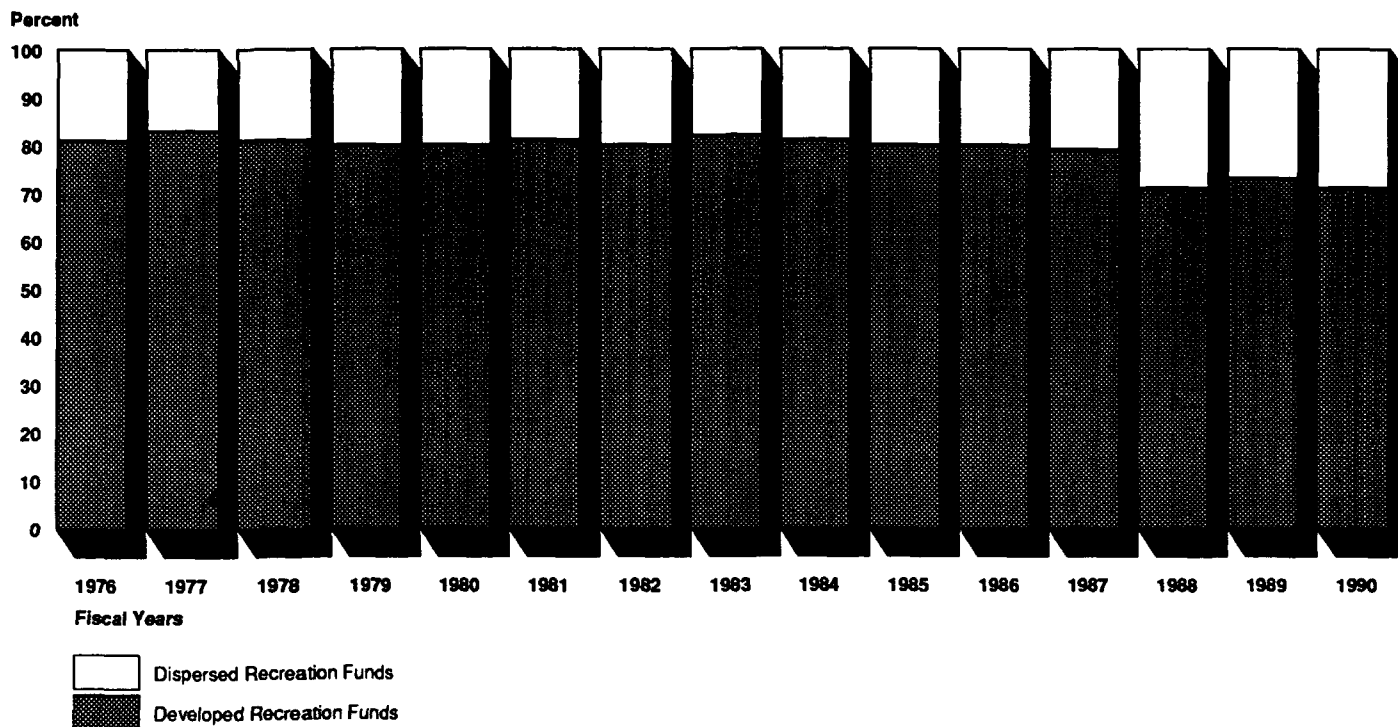
Relatively small changes in the number and season length, as well as larger changes in the type and size of Forest Service developed recreation sites, were attributable to a number of factors. While limited resources were one factor in some of the changes that have occurred over time, on an overall basis it does not appear to be a predominant or overriding reason.

However, limited resources have sometimes resulted in eliminated or reduced services at developed recreation sites. According to some district officials, limited resources have contributed to an increased use of concessionaires and contractors to operate sites; however, questionnaire data indicate that nationwide no significant change in the proportion of sites operated by concessionaires and contractors has occurred from 1985 to 1990.

Finally, while the National Recreation Strategy has helped the Forest Service to compensate for reduced resources, it is not likely, by itself, to eliminate or substantially reduce the backlog.

# Distribution of Forest Service Funding and Workforce Between Developed and Dispersed Recreation, Fiscal Years 1976-90

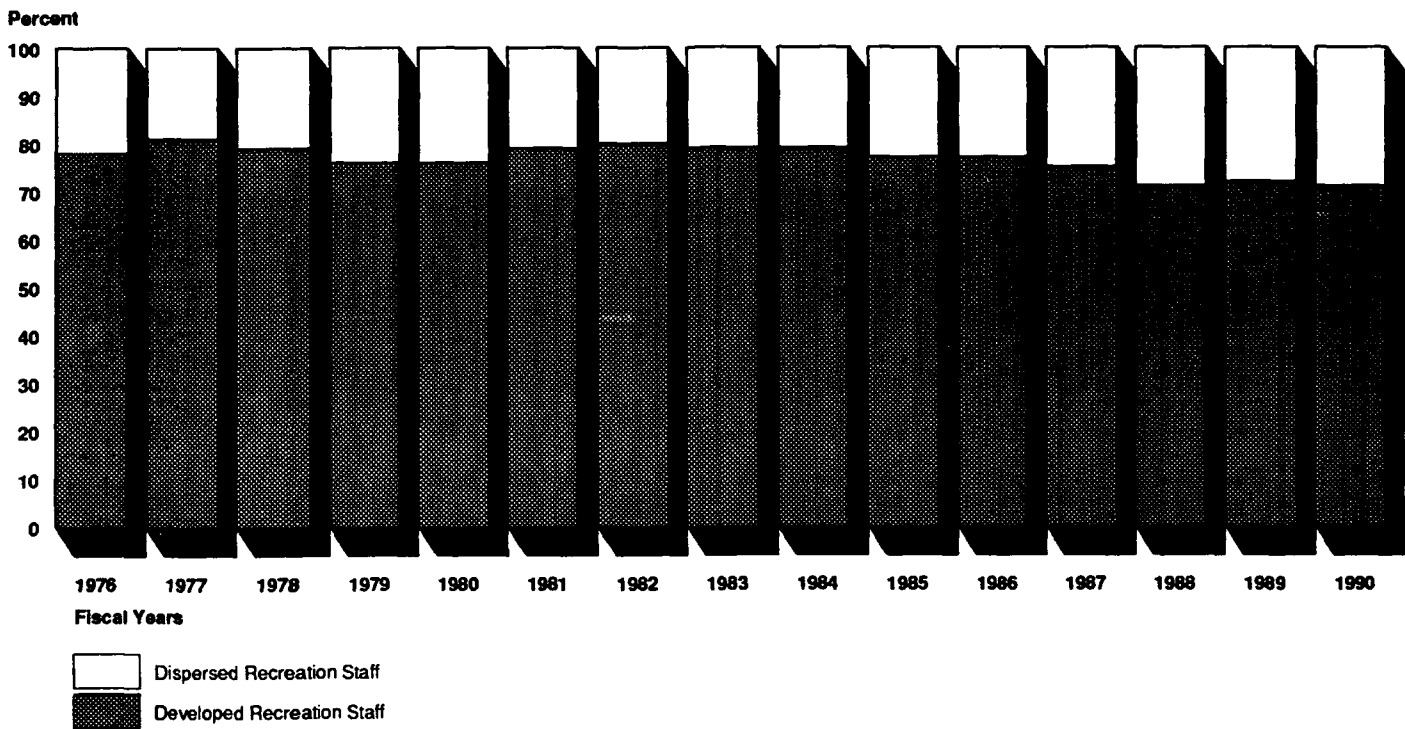
**Figure I.1: Distribution of Forest Service Recreation Funding Between Developed and Dispersed Programs, Fiscal Years 1976 Through 1990**



Source: Basic data provided by the Forest Service

**Appendix I**  
**Distribution of Forest Service Funding and**  
**Workforce Between Developed and Dispersed**  
**Recreation, Fiscal Years 1976-90**

**Figure I.2: Distribution of Forest Service Recreation Staff Between Developed and Dispersed Programs, Fiscal Years 1976 Through 1990**



Staff is expressed as full-time equivalent personnel.  
Source: Basic data provided by the Forest Service.



# Budget History: Total Forest Service Recreation Management and Recreation Construction for Fiscal Years 1980-90

In thousands of constant 1990 dollars

Budget item/level	1980	1981
<b>Forest Service total:</b>		
Agency request	\$1,668,585	\$1,566,915
Dept. allowance <sup>a</sup>	1,245,047	1,180,835
President's budget	1,169,731	1,222,693
Appropriations	1,283,876	1,244,150
<b>Recreation Management</b>		
Agency request	N/A	N/A
Dept. allowance	N/A	N/A
President's budget	125,627	134,840
Appropriations	147,176	136,147
<b>Recreation Construction</b>		
Agency request	95,801	58,286
Dept. allowance	12,793	11,881
President's budget	13,160	6,837
Appropriations	14,863	9,440

**Appendix II**  
**Budget History: Total Forest Service**  
**Recreation Management and Recreation**  
**Construction for Fiscal Years 1980-90**

Fiscal years								
1982	1983	1984	1985	1986	1987	1988	1989	1990
\$1,433,891	\$1,428,181	\$1,409,201	\$1,318,955	\$1,308,056	\$1,322,262	\$1,324,338	\$1,346,284	\$1,412,899
1,336,347	1,403,330	1,311,982	1,255,340	1,285,037	1,176,074	1,282,966	1,286,254	1,428,661
1,112,250	1,310,454	1,169,128	1,225,720	1,231,437	999,428	1,101,210	1,205,463	1,328,467
1,273,769	1,277,416	1,188,208	1,236,028	1,240,853	1,294,183	1,347,119	1,382,004	1,726,313
N/A	N/A	N/A	90,791	99,455	113,628	112,134	147,475	126,284
N/A	N/A	N/A	82,931	91,810	99,159	104,062	118,306	110,485
136,963	106,786	94,760	95,077	91,898	37,701	45,894	100,508	99,418
100,540	105,197	102,068	99,801	98,710	101,479	105,033	115,991	115,519
14,290	0	8,361	6,039	18,236	39,108	28,870	21,701	21,628
10,021	0	7,264	2,286	3,184	22,346	10,247	21,701	20,022
7,659	5,694	0	2,283	2,631	5,475	8,429	19,914	7,900
6,295	43,944 <sup>b</sup>	10,475	14,020	12,537	18,893	19,491	24,993 <sup>c</sup>	27,858

<sup>a</sup>Department of Agriculture Allowance

<sup>b</sup>Includes \$31.6 million (\$25 million in 1983 dollars) in "Jobs Bill" funds, P.L. 98-9, to help high unemployment areas.

<sup>c</sup>Differs from figure shown in Chapter 2 (\$24 million) because figures in this appendix are shown in constant 1990 dollars.

Source: Basic data provided by the Forest Service

# Questionnaires Sent to Developed Recreation Sites and Forest Service Districts

## U.S. GENERAL ACCOUNTING OFFICE

### SURVEY ON DEVELOPED RECREATION SITES IN NATIONAL FORESTS

The U.S. General Accounting Office (GAO), an agency that assists Congress in evaluating federal programs, is conducting a review of developed recreation sites in National Forests. The purpose of this review is to obtain an accurate estimate of the cost of needed maintenance and reconstruction for developed recreation sites. In addition, the review will focus on the Forest Service's management of developed site maintenance as well as recent trends in developed recreation. The developed recreation site named on the label below was randomly selected for this study.

#### INSTRUCTIONS

- \* The questionnaire should be completed by the person(s) most familiar with conditions at the developed recreation site named on the label below.
- \* If your district receives more than one questionnaire, please complete each questionnaire for only the site listed on the front label. If you are unsure about which site the questionnaire is for, check the serial number on the label with your RIM records or call us at the numbers listed below.
- \* The questionnaire should not take long to complete. Your response is critical to our ability to provide accurate information to the Congress.
- \* Please complete the questionnaire(s) and return it within 10 working days, using the enclosed self-addressed business reply envelope.
- \* If you have any questions concerning this survey, please contact Mr. William Temmler at FTS 564-0023 or (303) 844-0023 or Ms. Greg Elliott at FTS 634-7287 or (202) 634-7287.
- \* If the return envelope is missing or misplaced, please return the questionnaire to:

Mr. William Temmler  
U.S. General Accounting Office  
Suite 800  
1244 Speer Blvd.  
Denver, Colorado 80204

NOTE: To obtain as many usable responses as possible, all questionnaires were reviewed and edited for consistency and Forest Service officials were contacted by telephone to resolve any ambiguous response patterns. In cases where our analysis indicated that responses to an item were not reliable, no summary statistic is reported in this appendix.

Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts

1. Approximately how old is this site?  
(Check one) N = 12,332

8.29 1. ☐ 10 years old or less

14.31 2. ☐ 11 to 20 years old

32.59 3. ☐ 21 to 30 years old

18.07 4. ☐ 31 to 40 years old

26.73 5. ☐ Over 40 years old

2. Is this site permanently closed?  
(Check one) N = 12,530

3.92 1. ☐ Yes

96.08 2. ☐ No --> Skip to Question 5

3. In your opinion, what was the primary  
reason for permanently closing this  
site? (Check one) N = 491

13.23 1. ☐ Demand decreased

14.57 2. ☐ Health and safety hazard

12.86 3. ☐ Resource damage

1.34 4. ☐ Cost per visitor day was  
excessive

28.40 5. ☐ Insufficient funding

.20 6. ☐ Capacity at this site  
replaced by capacity at a  
new site

0 7. ☐ Capacity at this site  
replaced by capacity added  
to an existing site

29.40 8. ☐ Other, please specify

NOTE: Percentages may not total to 100.00 due to  
rounding of individual numbers.

4. As of September 30, 1989, what is the  
total dollar amount, if any, of  
Maintenance Class 4 (Facility  
Elimination) costs related to closure  
of this site? By Maintenance Class 4,  
we mean costs that include removal of  
the facilities and rehabilitation of  
the land it occupies. (Enter Amount.  
If none, enter zero.)

\$ \_\_\_\_\_

If this site has been permanently  
closed please STOP and return the  
questionnaire in the enclosed self-  
addressed business reply envelope.  
Thank-you for your assistance.

**Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts**

If you have not physically inspected the site named on the label in this questionnaire during fiscal year 1989, please inspect the site, if at all possible, before answering the next question.

5. Please estimate the dollar amount, if any, of funds needed for deferred maintenance and/or reconstruction (backlog) in each of the following maintenance class categories as of September 30, 1989 for the site named on the label. Include only facility costs in this question. Resource related costs will be listed in a separate question. Use the definitions listed on the opposite page when making your estimates. Do NOT include any overhead costs such as clerical costs, utilities, office rent, etc. in your estimates. (Enter dollar amount. If none, enter zero.)

	Dollar amount needed for deferred maintenance and/or reconstruction
Rehabilitation/Reconstruction (costs 20-50% of replacement)	\$
Replacement/Major Rehabilitation (costs over 50% of replacement)	\$
Facility Elimination (e.g. tables, fountains, etc.)	\$
Facility Addition (except for PAOT additions)	\$
<b>TOTAL</b>	\$

**DO NOT INCLUDE  
RESOURCE RELATED  
COSTS. THEY WILL  
BE LISTED IN  
QUESTION 7.**

6. Consider the total dollar amount shown in Question 5. Please estimate what percent of that total, if any, is needed to eliminate facility related health and safety hazards at the site named on the label such as contaminated drinking water supplies, leaking toilet vaults, etc. (Enter percent. If none, enter zero.)

\_\_\_\_\_ % needed to eliminate  
health and safety hazards

7. Please estimate the total dollar amount, if any, needed for resource treatment at the site named on the label as of September 30, 1989. Use the definition of resource treatment listed on the opposite page. (Enter dollar amount. If none, enter zero.)

\$\_\_\_\_\_ needed for resource treatment

8. Consider the dollar amount listed in Question 7. Please estimate what percent of that total, if any, is needed to eliminate resource related health and safety hazards at the site named on the label such as hazardous tree branches, poisonous plants, etc. (Enter percent. If none, enter zero.)

\_\_\_\_\_ % needed to eliminate resource related  
health and safety hazards

Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts

DEFINITIONS OF MAINTENANCE CLASS (MC) CATEGORIES  
AND RESOURCE TREATMENT

Estimates for each category should include only costs (wages, materials, purchases, transportation, etc.) associated with facility maintenance and replacement. DO NOT include clean-up, sanitation, or other operation costs. Estimates should reflect total costs to rehabilitate or replace all facilities inventoried within each of the categories.

DEFINITIONS FOR QUESTION 5

Rehabilitation/Reconstruction (MC 2) - A facility (such as a picnic table, toilet, etc.) needs major ("one time") repair to restore it to a safe and satisfactory condition. Costs will generally run between 20 - 50 percent of current facility replacement costs.

Facility Replacement/Major Rehabilitation (MC 3) - A facility (such as a picnic table, toilet, etc.) must be replaced because it is in unsatisfactory condition or no longer compatible with site design or ROS classification. Rehabilitation costs will generally exceed 50 percent of current facility replacement costs. Facility may be replaced with the same kind of facility or a different kind that will serve the same purpose. Costs will include removal of the old facility and purchase and installation of the new facility.

Facility Elimination (MC 4) - A facility (such as a picnic table, toilet, etc.) may be in good or poor condition but is no longer needed at this location. Costs will include removal of the facility and rehabilitation of the land it occupies.

Facility Additions (MC 5) - Facilities (such as picnic tables, toilets, etc.) to be added to the site/area that will serve an essential function for public use. DO NOT enter facilities and costs based on unreasonable expectations. Capital investment program costs may be included, except for those intended solely to expand the site beyond its present boundary or increase PAOT capacity.

DEFINITION FOR QUESTION 7

Resource Treatment - These are special resource related (rather than facility related) maintenance needs. Resource treatment needs generally are considered one-time actions to correct specific problems such as: fires, floods, vandalism, erosion, deterioration or loss of significant cultural resource properties, poisonous plants, hazardous tree branches, etc.

**Appendix III**  
**Questionnaires Sent to Developed Recreation**  
**Sites and Forest Service Districts**

- |  |  |
|--|--|
| <p>9. Was this developed site physically inspected in fiscal year 1989? (Check one) N = 11,420</p> <p>93.32 1. <input type="checkbox"/> Yes</p> <p>6.68 2. <input type="checkbox"/> No</p> <p>10. What is the current maximum capacity (PAOTs) for this site? (Enter number)</p> <p style="margin-left: 40px;">_____ maximum PAOTs</p> <p>11. Was any capacity permanently added to this site (as measured in PAOTs) between the end of fiscal year 1986 and the end of fiscal year 1989? (Check one) N = 11,416</p> <p>5.17 1. <input type="checkbox"/> Yes</p> <p>91.80 2. <input type="checkbox"/> No ----&gt; Skip to Question 14</p> <p>3.03 3. <input type="checkbox"/> Don't know ----&gt; Skip to Question 14</p> <p>12. How much additional capacity, as measured in PAOTs, was added during this period? (Enter number of PAOTs)</p> <p style="margin-left: 40px;">_____ additional PAOTs</p> <p>13. In your opinion, what was the primary reason for the addition(s) of capacity to this site since the end of fiscal year 1986? (Check one) N = 584</p> <p>6.67 1. <input type="checkbox"/> To offset capacity lost at other sites</p> <p>71.25 2. <input type="checkbox"/> To meet increased demand</p> <p>2.22 3. <input type="checkbox"/> Site not changed; capacity recalculated</p> <p>0 4. <input type="checkbox"/> Don't know/Unsure</p> <p>19.86 5. <input type="checkbox"/> Other, please specify</p> | <p>14. Was any capacity permanently eliminated from this site (as measured in PAOTs) between the end of fiscal year 1986 and the end of fiscal year 1989? (Check one) N = 11,420</p> <p>3.12 1. <input type="checkbox"/> Yes</p> <p>95.24 2. <input type="checkbox"/> No ----&gt; Skip to Question 17</p> <p>1.65 3. <input type="checkbox"/> Don't know ----&gt; Skip to Question 17</p> <p>15. How much capacity, as measured in PAOTs, was eliminated from this site during this period?</p> <p style="margin-left: 40px;">_____ PAOTs eliminated</p> <p>16. In your opinion, what was the primary reason for the elimination of capacity from this site since the end of fiscal year 1986? (Check one) N = 356</p> <p>10.04 1. <input type="checkbox"/> Demand at the site had decreased</p> <p>11.24 2. <input type="checkbox"/> Health and safety hazards</p> <p>25.62 3. <input type="checkbox"/> Resource damage</p> <p>4.37 4. <input type="checkbox"/> Insufficient funding</p> <p>0 5. <input type="checkbox"/> Capacity at this site was replaced by capacity at a new site</p> <p>0 6. <input type="checkbox"/> Capacity at this site was replaced by capacity added to an existing site</p> <p>36.54 7. <input type="checkbox"/> Site not changed; capacity recalculated</p> <p>0 8. <input type="checkbox"/> Don't know/Unsure</p> <p>12.19 9. <input type="checkbox"/> Other, please specify</p> |
|--|--|

**Appendix III**  
**Questionnaires Sent to Developed Recreation**  
**Sites and Forest Service Districts**

- |   |   |
|---|---|
| <p>17. Please provide, for this site, the estimated number of RVDs (recreation visitor days) for calendar years 1987 through 1989. (Enter number)</p> <p>_____ RVDs in 1987</p> <p>_____ RVDs in 1988</p> <p>_____ RVDs in 1989</p> <p>18. Did the site identified on the label have a 1989 managed use season? By managed use season we mean the time this site is open for public use, with routine maintenance, cleanup and operation on a scheduled basis.</p> <p style="text-align: center;">N = 11,114</p> <p>%</p> <p>97.13 1. <input type="checkbox"/> Yes</p> <p>2.87 2. <input type="checkbox"/> No, site was closed for 1989 managed use season—&gt;Skip to Question 20</p> <p>19. What are the beginning and ending dates for this site's 1989 managed use season? (Enter month and day)</p> <p>Beginning date _____</p> <p style="text-align: center;">(month)/(day)</p> <p>Ending date _____</p> <p style="text-align: center;">(month)/(day)</p> <p>20. Is the length of the 1989 managed use season at this site different from the length of the 1986 season? (Check one)</p> <p style="text-align: center;">N = 11,106</p> <p>3.98 1. <input type="checkbox"/> Yes, 1989 season is shorter</p> <p>12.09 2. <input type="checkbox"/> Yes, 1989 season is longer</p> <p>78.28 3. <input type="checkbox"/> No —&gt; Skip to Question 22</p> <p>5.65 4. <input type="checkbox"/> Don't know —&gt; Skip to Question 22</p> | <p>21. In your opinion, what is the primary reason that the 1989 managed use season is different from the 1986 managed use season? (Check one)</p> <p style="text-align: center;">N = 1,782</p> <p>1.25 1. <input type="checkbox"/> Shorter due to lack of demand</p> <p>9.79 2. <input type="checkbox"/> Shorter due to insufficient funding</p> <p>40.20 3. <input type="checkbox"/> Longer to meet increased demand</p> <p>1.28 4. <input type="checkbox"/> Longer to offset shortened seasons at other sites</p> <p>18.41 5. <input type="checkbox"/> Longer or shorter due to weather</p> <p>.73 6. <input type="checkbox"/> Don't know/Unsure</p> <p>28.33 7. <input type="checkbox"/> Other, please specify</p> <p>22. Who currently operates this site on a day-to-day basis? (Check one)</p> <p style="text-align: center;">N = 11,421</p> <p>76.27 1. <input type="checkbox"/> Forest Service</p> <p>10.15 2. <input type="checkbox"/> Concessionaire under a special use permit</p> <p>1.95 3. <input type="checkbox"/> Contractor</p> <p>11.63 4. <input type="checkbox"/> Other, please specify</p> <p>23. Has the operator status of this site changed during the last 5 years? (Check one)</p> <p style="text-align: center;">N = 11,279</p> <p>7.19 1. <input type="checkbox"/> Yes</p> <p>92.81 2. <input type="checkbox"/> No —&gt; Skip to Question 25</p> |
|---|---|



Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts

24. Which of the following best describes  
the most recent change in this site's  
operator status? (Check one) N = 803

- %
- 26.30 1. ☐ Changed from Forest Service  
operated to contractor  
operated
- 52.27 2. ☐ Changed from Forest Service  
operated to concessionaire  
operated
- 0 3. ☐ Changed from contractor  
operated to concessionaire  
operated
- 1.79 4. ☐ Changed from contractor  
operated to Forest Service  
operated
- 0 5. ☐ Changed from concessionaire  
operated to contractor  
operated
- 17.68 6. ☐ Changed from concessionaire  
operated to Forest Service  
operated
- 1.96 7. ☐ Other, please specify

25. Please enter the name and phone number  
of Forest Service staff completing this  
questionnaire in the event that we have  
questions about your responses:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone number: ( ) \_\_\_\_\_

26. If you have any comments on topics  
covered in this questionnaire or on  
developed recreation sites in general,  
please print them in the space below or  
attach additional pages as necessary.

Thank you for your assistance

**Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts**

**U.S. GENERAL ACCOUNTING OFFICE**

**SURVEY OF NATIONAL FOREST DISTRICTS**

The U.S. General Accounting Office (GAO), an agency that assists Congress in evaluating federal programs, is conducting a review of developed recreation in National Forests. The purpose of this review is to obtain an accurate estimate of the cost of needed maintenance and reconstruction for developed recreation sites. In addition, the review will focus on the Forest Service's management of developed site maintenance.

**INSTRUCTIONS**

- \* This questionnaire should be completed by the person(s) most familiar with developed recreation at this district.
- \* The questionnaire should not take long to complete. It is critical to have responses from all districts so that we can provide Congress with accurate information about developed recreation in the National Forests.
- \* Please complete this questionnaire and return it within 10 working days, using the enclosed self-addressed business reply envelope.
- \* If you have any questions concerning this survey, please contact Mr. William Temmler at FTS 564-0023 or (303) 844-0023 or Ms. Greg Elliott at FTS 634-7287 or (202) 634-7287.
- \* If the return envelope is missing or misplaced, please return the questionnaire to:

Mr. William Temmler  
U.S. General Accounting Office  
Suite 800  
1244 Speer Blvd.  
Denver, Colorado 80204

Name of Forest:

Name of District:

**Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts**

<p>1. Were any developed recreation sites (such as campgrounds, ski areas, etc.) added in this district during fiscal year 1988, including concessionaire and/or contractor operated developed sites? (Check one.) N = 631</p> <p>9.2 1. <input type="checkbox"/> Yes</p> <p>90.8 2. <input type="checkbox"/> No —&gt;Skip to Question 3</p> <p>2. Enter the number of all new developed sites that were added in fiscal year 1988 for each of the following reasons. If there was more than one reason for adding a particular site, please list the site only once, and place it in the category that best describes the primary reason for adding the developed site. N = 58</p> <table border="0" style="width: 100%;"> <tr> <td></td> <td align="center"><b>Number of new sites added</b></td> </tr> <tr> <td>1. Offset capacity lost at other sites</td> <td align="center">3</td> </tr> <tr> <td>2. Meet increased demand</td> <td align="center">43</td> </tr> <tr> <td>3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)</td> <td align="center">18</td> </tr> <tr> <td>4. Don't know the reason</td> <td align="center">0</td> </tr> <tr> <td>5. Other, please specify reasons below</td> <td align="center">18</td> </tr> <tr> <td>_____</td> <td align="center">_____</td> </tr> <tr> <td>_____</td> <td align="center">_____</td> </tr> <tr> <td><b>TOTAL NEW SITES ADDED IN FY 88:</b></td> <td align="center">_____</td> </tr> </table>		<b>Number of new sites added</b>	1. Offset capacity lost at other sites	3	2. Meet increased demand	43	3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)	18	4. Don't know the reason	0	5. Other, please specify reasons below	18	_____	_____	_____	_____	<b>TOTAL NEW SITES ADDED IN FY 88:</b>	_____	<p>3. Were any developed recreation sites (such as campgrounds, ski areas, etc.) added in this district during fiscal year 1989, including concessionaire and/or contractor operated developed sites? (Check one.) N = 631</p> <p>11.1 1. <input type="checkbox"/> Yes</p> <p>88.9 2. <input type="checkbox"/> No —&gt;Skip to Question 5</p> <p>4. Enter the number of all new developed sites that were added in fiscal year 1989 for each of the following reasons. If there was more than one reason for adding a particular site, please list the site only once, and place it in the category that best describes the primary reason for adding the developed site. N = 70</p> <table border="0" style="width: 100%;"> <tr> <td></td> <td align="center"><b>Number of new sites added</b></td> </tr> <tr> <td>1. Offset capacity lost at other sites</td> <td align="center">4</td> </tr> <tr> <td>2. Meet increased demand</td> <td align="center">35</td> </tr> <tr> <td>3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)</td> <td align="center">36</td> </tr> <tr> <td>4. Don't know the reason</td> <td align="center">0</td> </tr> <tr> <td>5. Other, please specify reasons below</td> <td align="center">25</td> </tr> <tr> <td>_____</td> <td align="center">_____</td> </tr> <tr> <td>_____</td> <td align="center">_____</td> </tr> <tr> <td><b>TOTAL NEW SITES ADDED IN FY 89:</b></td> <td align="center">_____</td> </tr> </table>		<b>Number of new sites added</b>	1. Offset capacity lost at other sites	4	2. Meet increased demand	35	3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)	36	4. Don't know the reason	0	5. Other, please specify reasons below	25	_____	_____	_____	_____	<b>TOTAL NEW SITES ADDED IN FY 89:</b>	_____
	<b>Number of new sites added</b>																																				
1. Offset capacity lost at other sites	3																																				
2. Meet increased demand	43																																				
3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)	18																																				
4. Don't know the reason	0																																				
5. Other, please specify reasons below	18																																				
_____	_____																																				
_____	_____																																				
<b>TOTAL NEW SITES ADDED IN FY 88:</b>	_____																																				
	<b>Number of new sites added</b>																																				
1. Offset capacity lost at other sites	4																																				
2. Meet increased demand	35																																				
3. Meet a new type of demand (e.g., huts, RV accessible campgrounds, etc.)	36																																				
4. Don't know the reason	0																																				
5. Other, please specify reasons below	25																																				
_____	_____																																				
_____	_____																																				
<b>TOTAL NEW SITES ADDED IN FY 89:</b>	_____																																				

Appendix III  
Questionnaires Sent to Developed Recreation  
Sites and Forest Service Districts

5. Was your district part of the pilot program for "end results budgeting" (or big bucket funding) in fiscal year 1989? N = 632

27.5 1. [ ] Yes—>ANSWER QUESTIONS 6A AND 7A IN COLUMN 1 AND GO ON TO QUESTION 8.

72.5 2. [ ] No —>ANSWER QUESTIONS 6B AND 7B IN COLUMN 2 AND GO ON TO QUESTION 8.

Column 1

6A. What is the total dollar amount spent by your district in fiscal year 1989 in your recreation, cultural resource and wilderness programs? Your answer should include all funds that would previously have been designated as NFRN funds under the former budgeting program. (Enter dollar amount)

N = 174

\$ 18,435,908 FY89 funds  
spent for recreation  
in the district

7A. Of the total amount entered in Question 6A above, how much was spent on developed recreation sites? If you do not have exact numbers, please enter your best estimate. (Enter dollar amount) N = 174

\$ 10,845,327 FY89 funds spent on  
developed recreation  
sites in the district

Column 2

6B. What is the total dollar amount of NFRN funds that your district received for fiscal year 1989? Please include any amounts received in addition to the original disbursement. (Enter dollar amount) N = 457

\$ 56,562,828 FY89 NFRN funds  
received for recreation  
in the district

7B. Of the total amount entered in Question 6B above, how much was used for developed recreation sites? If you do not have exact numbers, please enter your best estimate. (Enter dollar amount) N = 457

\$ 31,727,614 FY89 funds used for  
developed recreation  
sites in the district

**Appendix III**  
**Questionnaires Sent to Developed Recreation**  
**Sites and Forest Service Districts**

8. Please enter the name, title and phone number of Forest Service staff completing this questionnaire in the event that we have questions about your responses:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone number: ( ) \_\_\_\_\_

9. If you have any comments on topics covered in this questionnaire or on developed recreation sites in general, please enter them in the space below or attach additional pages as necessary.

Thank you for your assistance

# Trend in Number and Capacity of Developed Recreation Sites by Type, Selected Years From 1972 to 1987

Type of site	Year				
	1972	1976	1980	1984	1987 <sup>a</sup>
Boating, swimming sites	1,147	1,216	1,297	1,426	1,461
Campgrounds	5,267	4,764	4,775	4,462	4,402
Documentary sites	NR <sup>b</sup>	71	99	191	175
Fishing sites	NR <sup>b</sup>	NR <sup>b</sup>	NR <sup>b</sup>	89	124
Hotels, lodges, resorts	380	369	343	548	547
Interpretive and information sites	402	499	738	918	949
Observation sites	427	437	468	482	474
Organization sites	560	545	518	490	478
Other concessionaire sites	144	156	141	158	146
Picnic areas	1,654	1,523	1,553	1,467	1,438
Playgrounds, parks, sport sites	33	67	67	101	102
Recreation residence sites	1,950	1,831	1,595	1,512	1,393
Ski areas, winter sport sites	208	225	234	307	330
Trailheads	NR <sup>b</sup>	NR <sup>b</sup>	NR <sup>b</sup>	672	880
<b>Total sites</b>	<b>12,172</b>	<b>11,703</b>	<b>11,828</b>	<b>12,823</b>	<b>12,899</b>
<b>Total capacity<sup>c</sup></b>	<b>1,347,172</b>	<b>1,419,981</b>	<b>1,494,263</b>	<b>1,649,807</b>	<b>1,696,660</b>

<sup>a</sup>Latest year for which detailed data is available

<sup>b</sup>None reported

<sup>c</sup>Capacity is measured in number of people at one time

Source: Forest Service

# Major Contributors to This Report

---

## Resources Community, and Economic Development Division, Washington, D.C.

James R. Hunt, Assistant Director  
Charles F. Barchok, Assignment Manager  
K. Greg Elliott, Staff Evaluator  
Edwin H. Woodward, Staff Evaluator  
Michelle Gambone, Systems Analyst

---

## Denver Regional Office

William J. Temmler, Evaluator-in-Charge  
Kathleen M. Arnold, Staff Evaluator  
W. Stephen Lowrey, Staff Evaluator  
Felicia A. Turner, Systems Analyst  
Pamela K. Tumler, Reports Analyst

---

## Seattle Regional Office

Robert B. Miller, Staff Evaluator  
Linda Akiyama, Staff Evaluator





---

# Related GAO Products

---

Parks and Recreation: Maintenance and Reconstruction Backlog on National Forest Trails (GAO/RCED-89-182, September 1989).

Wilderness Preservation: Problems in Some National Forests Should Be Addressed (GAO/RCED-89-202, September 1989).

National Forests: Special Recreation Areas Not Meeting Established Objectives (GAO/RCED-90-27, February 1990).